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The NATIONAL BANKING REVIEW

A JOURNAL OF POLICY AND PRACTICE

Articles on

- Compensatory Balances
- A New Municipal Bond Yield Curve
- Profitability of Time Deposits
- Banking as a "Line of Commerce"
- Bank Regulation and Reserve Membership
- Alternative Monetary Rules in Canada

- A Rejoinder on the Philadelphia Case
- Foreign Branches and Edge Act Corporations
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- Book Reviews

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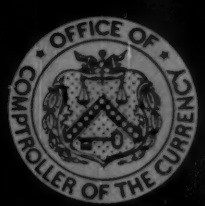

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The NATIONAL BANKING REVIEW

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► THOMAS MAYER and IRA O. SCOTT, JR.

Compensatory Balances: A Suggested Interpretation

Banks frequently require a business borrower to maintain a compensatory balance during the life of the loan or of the line of credit. Such balances are demand deposits which the customer is supposed to maintain, usually amounting to between ten percent and twenty percent of the face value of the loan or of the line of credit.[1] In many cases the compensatory balance is computed as an average—in other words, the customer may reduce the size of his deposit at one time, if at some other time during the life of the loan or line of credit he increases it correspondingly. In other cases, compensatory balances are treated as minimum balances which should be maintained at all times. A less rigid practice, which is also sometimes referred to as a compensatory balance requirement, is that, in deciding upon a loan, the bank takes into consideration the size of the customer's account in a previous period.

Such compensatory balances are quite common, particularly for loans drawn under lines of credit. Thus, the Federal Reserve study of bank loan practices found that in 1955 approximately one fourth of the banks surveyed had minimum balance requirements for some of their business borrowers and that over

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The authors are indebted for helpful comments to Mr. John Heath of Manchester University.

[1] Caroline Cagle, "Credit Lines and Minimum Balance Requirements," *Federal Reserve Bulletin*, June 1956, p. 579.

ninety per cent of the banks with deposits of $500,000,000 and over had such requirements.[2] A survey of the hundred largest banks and a survey of our own reported below also show that the great majority of banks require such balances from at least some borrowers.[3]

I.

Many explanations of this practice have been given. In a recent article, Donald Hodgman has suggested that, by making loans at lower rates to borrowers who have compensatory balances, banks do, in effect, pay imputed interest on demand deposits; but that, by having fairly uniform compensatory balance requirements, banks are able to limit competition for deposits.[4] Three reasons cited by Carolyn Cagle are: first, to discourage firms from borrowing at more than one bank; second, to induce firms to keep deposits of affiliates with the particular bank; and third, to limit deposit fluctuations and thereby gain a higher imputed interest rate.[5]

We agree with Hodgman that banks do pay imputed interest on demand deposits by using compensatory balance requirements, but we disagree with his explanation of why banks use this device instead of paying interest directly on demand deposits. An obvious explanation might seem to be the prohibition of interest on demand deposits, but this explanation is not adequate because banks used compensatory balances long before the payment of interest on demand deposits was prohibited.[6] Using compensatory

[2] *Ibid.*, p. 576.

[3] P. Gallot, "Why Compensating Balances?—Part II," *Bulletin of the Robert Morriss Associates*, August 1958, pp. 309-319.

[4] Donald R. Hodgman, "The Deposit Relationship and Commercial Bank Investment Behavior," *Review of Economics and Statistics*, August 1961, pp. 257-268.

[5] Cagle, *op. cit.*, p. 576. In addition to the above, there are many other explanations of compensatory balances. But perhaps the most popular explanation is the one above, that by forcing customers to hold compensatory balances a bank raises the effective rate of interest on the funds actually withdrawn from the bank without the customer being aware of the higher effective rate. Another varient of this argument relies not on customer ignorance but upon the usury law ceiling on stated interest rates. (See R. B. Westerfield, "The Balance Required of Borrowers," *Journal of Political Economy*, June 1925, p. 263.) Another explanation is the feeling of banks that someone who uses their funds should also contribute towards supplying them. Moreover, as Roland Robinson has pointed out, a bank can seize the compensatory balance as an offset against the loan if the customer fails (*The Management of Bank Funds*, New York: McGraw Hill, 1951, p. 106). George Garvy, on the other hand, has suggested that there is a tax advantage for individuals in paying for bank services by holding a compensatory balance, instead of paying for them directly (*Deposit Velocity and its Significance*, New York, 1959, p. 30). For some other explanations see W. Prendergast, and W. Steiner, *Credit and its Uses*, New York: D. Appleton & Company, 1931, pp. 341-342.

[6] George Garvy has argued that, "prior to 1933 commercial banks paid interest on demand deposits, no compensating balances in the current sense were held, and the practice of requiring commensurate balances was less prevalent than now." (*Deposit Velocity and its Significance*, New York, *op. cit.*, p. 32.) But there is evidence that the practice of requiring borrowers to hold demand balances whether called "compensatory balances" or "commensurate balances" was quite widespread. Thus Mun, in the *Encyclopedia of Banking and Finance*, published in 1924, has the following entry: "Average Loan and Balance File: A card file or book customarily kept by banks to show each customer's average daily or monthly loans and deposits over a period of, say, ten years. . . . It furnishes a quick and convenient means of obtaining important information concerning depositors' accounts, e. g., (1) amount of average deposits and loans as a measure of profitableness, (2) to determine the average balance as a measure of possible borrowing power when applying for a loan, (3) to determine whether the average balance is in proportion to loans (usually a 20 per cent average balance is required to be maintained against loans) . . ." (p. 26). Similarly in 1931 William Prendergast and Steiner wrote: "The conditions which banks often prescribe for their borrowing accounts include . . . maintenance of reciprocal balances. Bank practices

balances as a way of paying imputed interest on demand deposits would limit competition for demand deposits only if all banks required the same compensatory balance and charged the same explicit rate on their loans. Hodgman provides no evidence that competing banks do have the same compensatory balance requirements. Moreover, while the interest rate on loans is the same at different banks for prime rate borrowers, this is not so for other borrowers. Hence, Hodgman's theory does not provide an explanation of the fact that customers who do not receive the prime rate are also required to hold compensatory balances.

The desire of banks to induce a firm to maintain no other banking connection, and the attempt to obtain the balances of affiliates might explain why banks want to pay interest on demand deposits, but it does not explain why they prefer doing so through compensatory balances. Finally, the attempt to limit deposit fluctuations appears to be merely another aspect of the argument mentioned in footnote 5, and disposed of below [7] that banks use the compensatory balance requirement as a device for raising the effective interest rate. Thus, none of the above theories provide a satisfactory explanation for the existence of compensatory balances.

II.

Although the above explanations are not adequate, the compensatory balance requirement surely needs explaining. For, on the surface, such a requirement appears to be irrational. That is, it can be shown that, on certain assumptions, a bank's earnings will increase if compensatory balance requirements are eliminated and the effective rate of interest is charged on loans.[8]

Since compensatory balance requirements are essentially compulsory derivative deposits, the derivative deposit formula developed by C. A. Phillips [9] may be used.

Let k = ratio of derivative deposits (compensatory balances) to loans

c = Cash inflow

in requiring borrowers to maintain compensating, proportional, or reciprocal balances varies considerably. City banks in general make the requirement, while country banks do not. The usual figure is 20 per cent, but the range is from 10 to 25 per cent . . ." (*Credit and Its Uses*, *op. cit.*, p. 341). Additional examples could easily be cited from other writings prior to 1933.

[7] If customer ignorance is the explanation of compensatory balances, then we should find the compensatory balance requirement more frequently imposed on small firms, who presumably are less sophisticated, than on large firms. But the data show that compensatory balances are more common for large firms than for small firms. (See Cagle, *op. cit.*, p. 576.) The greater frequency of compensatory balances among large firms also disposes of the explanation which relies upon the usury laws, since the ceiling on interest rates is less relevant for loans to large firms than for loans to small firms. The argument that customers should contribute to the bank's funds has few testable implications, but it is clearly inconsistent with profit maximization, and sounds more like a justification than an explanation of the practice. The fact that banks can use compensatory balances as an offset against a failed customer's liability, may explain some of the popularity of the institution, but cannot be made (and Robinson, *loc. cit.*, does not attempt to make it) into *the* explanation of compensatory balances, because it provides only partial protection for the bank, and the bank can get the same partial protection by making a smaller loan. Moreover, a customer facing bankruptcy might withdraw his compensatory balance. (See Westerfield, *op. cit.*, pp. 276-277.) Finally, the tax advantage of compensatory balances mentioned by Garvy does not apply to corporations and hence cannot explain why they hold compensatory balances.

[8] For an alternative proof, see D. Hellweg, "A Note on the Compensatory Balance Requirements," *Journal of Finance*, March 1961, pp. 80-84.

[9] *Bank Credit*, New York: The Macmillan Company, 1920, pp. 32-76.

r = Required reserve ratio
X_n = Amount of loans without compensatory balance requirements
X_b = Amount of loans with compensatory balance requirements
i_n = Interest rate without compensatory requirements
i_b = Interest rate with compensatory balance requirements
e_n = Bank earnings without compensatory balance requirements
e_b = Bank earnings with compensatory balance requirements

It follows from these definitions that the relationship between nominal interest rates without and with compensatory balance requirements which give the same effective interest rate to the borrower may be expressed as follows:

(1) $$i_n = \frac{1}{(1-k)} i_b$$

Thus, the effective interest rate paid by the borrower on the funds actually available is the same whether, say, a five percent rate is charged without a compensatory balance or whether a four percent rate is combined with a twenty percent compensating balance.

Without compensating balance requirements, the volume of loans, X_n, which can be made as the result of a given inflow of cash, c, is given by

(2) $$X_n = c\,(1 - r)$$

The corresponding relationship with compensating balance requirements is

(3) $$X_b = \frac{c\,(1 - r)}{kr + 1 - k}$$ [10]

Bank earnings without and with the compensating balance requirement are, then, respectively,

(4) $$e_n = i_n\,[c(1 - r)]$$

and

(5) $$e_b = i_b \left[\frac{c\,(1 - r)}{kr + 1 - k}\right]$$

[10] See *ibid.*

That $e_n > e_b$ may be shown by substituting from (4) and (5), namely,

$$i_n\,[c(1 - r)] \quad i_b \left[\frac{c\,(1 - r)}{kr + 1 - k}\right]$$

Substituting for i_n from (1),

$$i_b\left(\frac{1}{1 - k}\right)[c(1 - r)] \quad i_b\left[\frac{c\,(1 - r)}{kr + 1 - k}\right]$$

$$1 > \frac{1 - k}{kr + 1 - k}$$

$$kr > o,$$

Since $k > o$ and $r > o$.

In other words, were it not for the factors discussed in the following section, bank earnings would be higher if the compensatory requirements were abolished and the higher, effective rate of interest charged on all loans. As far as the amount of interest paid is concerned, it is a matter of indifference to the individual borrower.[11]

There are circumstances, however, under which this conclusion does not follow. Let us remove one of the assumptions, namely, that the firm supplies the compensatory balance itself. Instead, assume the existence of link financing. This is a scheme under which a third party provides funds for the compensatory balance, so that the bank receives new deposits. If, as has been pointed out to us by Henry W. Schaeffer, all of the compensatory balance is provided by link financing, and if $k > r$, the earlier result is reversed. But this cannot explain the existence of the compensatory balance institution, since link financing is by no means used for all compensatory balances.

[11] The seeming paradox presented by indifference on the part of the borrower at the same time there is a "preference" for the zero compensating balance arrangement on the part of the lender is explained by the leakage of cash as the bank lends on the basis of the derivative deposits. Thus, the bank is unable to compensate fully for the lower rate of interest.

III.

In developing our explanation of compensatory balances, we shall accept Hodgman's conclusion that banks pay imputed interest on such balances through an adjustment of their loan rate and will offer some empirical evidence for this in the next section. The problem is then to explain why banks prefer paying imputed rather than actual interest—for, as pointed out above, the compensatory balance requirement antedates the legal prohibition of demand deposit interest. Moreover, banks could probably avoid the prohibition of demand deposit interest by giving their customers effective, but admittedly not legally binding, assurances that they could withdraw certain time deposits on demand, and that the bank would not object to frequent withdrawals of time deposits.

We wish to suggest several explanations. The first is price discrimination. There is imperfect competition in the market for bank deposits, and there are differences in the supply elasticity of various depositors. Here a bank can maximize profits by discriminating among depositors; i.e., by using the compensatory balance device to pay different imputed interest rates to different depositors. The elasticity of supply is presumably very low for low and middle income households who chose their bank mainly on the basis of convenience and is significantly greater for large firms operating in a national market. This difference can explain why compensatory balances are used only for business loans and not for consumer and mortgage loans. The price discrimination we have in mind here is discrimination among depositors *qua* depositors rather than discrimination among depositors *qua* borrowers. Insofar as the customer does not receive the prime rate, the bank can discriminate among borrowers in accordance with differences in their elasticity of demand for loans by simply charging different interest rates. Compensatory balances, on the other hand, allow it to discriminate among *suppliers* of funds.

A second explanation is that banks can use compensatory balances to discriminate among firms that are paying the prime rate.[12] According to this explanation, compensatory balances play a role analogous to price shading in other industries. But this cannot be the whole explanation since it applies only to prime rate borrowers.

Another explanation involving the prime rate is that compensatory balances are used to compensate for the stickiness of the prime rate. As one banker put it: "Changes in the prime rate are a crude and cumbersome tool. We use compensating balances to adjust our lending rates between prime rate changes."[13] This procedure is similar to that of the steel industry, where list prices are kept stable and charges for extras are adjusted instead.

A fourth explanation, suggested by Robert Emmer and by Davis and Guttentag, is that the compensatory balance requirement is not as expensive as it may appear at first.[14] In most explanations of

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[12] In his study of sales finance company borrowing, Donald Jacobs found that "the prime rate is accorded large number of borrowers with varying degree of risk; thus the compensating balance provision allows a finer distinction on price to the class of borrowers termed 'prime.' Although the compensating balance provision here becomes somewhat institutionalized, there is room for bargaining, especially on the inclusion or exclusion of certain operating and other balances or in computing compensating deposits." "Sources and Costs of Funds of Large Sales Finance Companies," in Board of Governors of the Federal Reserve System, *Consumer Installment Credit*, Washington, D.C., 1957, Part II, Vol. 1, p. 348. See also "The Hidden Cost of Borrowing," *op. cit.*, p. 57.

[13] "The Hidden Cost of Borrowing," *op. cit.*, p. 57.

[14] Robert Emmer, "Compensatory Balances and the Cost of Funds," *Journal of Business*,

compensatory balances it is assumed that the compensatory balance creates a net addition to the firm's need for funds; for, since it has to keep these funds on deposit, it cannot use them. But if, as Garvy has suggested [15] —and as we show in the next section—the firm is allowed to draw down its compensatory balance in an emergency, compensatory balances can serve as precautionary balances. In other words, when a customer receives a loan of, say, $10,000, he receives, say, an $8,000 transaction balance and a $2,000 precautionary balance. Insofar as he wanted to maintain a precautionary balance in any case, the cost of the compensatory balance requirement is less than the interest he pays on the $2000. Note that this argument only implies that the compensatory balance can be drawn down in an emergency. It does not imply that it can be drawn down without cost to the firm. Thus the bank may object to the failure to maintain the compensatory balance and may charge the customer a higher rate on subsequent loans, or even refuse to make a subsequent loan. All this means is that the initial $10,000 loan consists of two parts. On one part, the $8000, the firm pays one rate of interest, and, on the use of the remaining $2000, it pays what in effect may be a much higher imputed rate. But even if this imputed rate is quite high, it may be rational for the firm to prefer such a two-part loan. Assume, for example, that the rate of interest is six percent, the cost of drawing down the compensatory balance is five times as much (i.e., thirty percent), the absence of no risk aversion, a constant utility of money, and that the chance of drawing down the compensatory balance is less than one fifth, then the firm is better off with this arrangement than it is with a straight six percent loan for the whole amount.

Compensatory balances are not the only way in which a firm can take care of its precautionary needs without actually holding cash. One alternative is a line of credit, but this provides only limited security since it can be revoked. Another alternative is a formal takeout commitment. While this provides assurance for the firm (at a cost), it creates a potential liquidity problem for the banks, because if money becomes tight, many of its customers may use this commitment. But firms are limited in drawing down their compensatory balances by the need to maintain the bank's good will. Hence the bank can confine the drawing down of compensatory balances to situations where the firm faces an emergency instead of losing funds through the utilization of take-out commitments whenever interest rates rise.

IV.

We have tested the above explanations in two ways: first, by a questionnaire survey; and second, by analyzing the extent to which these explanations can account for the detailed characteristics of compensatory balances. We mailed questionnaires to a sample of banks. The largest banks were oversampled because they are more likely to have compensatory balance requirements. The response rate was approximately 70 percent.[16]

Since questions about discrimination among customers on the basis of elasticity of supply would lead to biased answers, such questions were avoided. Table 1 shows, however, that banks do pay imputed interest on compensatory balances,

October 1957, pp. 268-279; Richard G. Davis and Jack M. Guttentag, "Are Compensatory Balance Requirements Irrational?", *Journal of Finance*, March 1962, pp. 121-126; and Norman E. Pflomm, "Managing Company Cash," National Industrial Conference Board, *Studies in Business Policy* #99, New York: National Industrial Conference Board, 1961, p. 123.

[15] George Garvy, *op. cit.*, p. 32.

[16] This includes eleven banks which replied that they had no compensatory balance requirements, and four replies which could not be used because they did not give the bank's size.

Table 1

Compensatory Balance Practices

	Banks with Deposits of (millions of dollars)					
	Percent *			Number of cases in sample		
	250 and over	100-250	Less than 100	Over 250	100-250	Less than 100
Customers with compensatory balances sometimes obtain loans they could not get without them.	96	90	93	25	21	15
Customers with compensatory balances get lower rates of interest than they otherwise would.	91 †	84 §	93 ¶	22	19	15
The **size** of the compensatory balances is taken into account in setting interest rates.	96	95 §	93	25	21	15
Compensatory balance requirements are lower for particularly good and sound customers than for average customers.	17 ‡	19	21	24	21	14
As credit conditions change the size of the compensatory balance requirement is sometimes adjusted instead of the prime rate.	16	0	10	25	15	10

* Percent of those responding to question.

† Excludes two banks which refuse to make loans without compensatory balances.

‡ Does not include one bank which requires lower balances from some borrowers not because of their soundness, but because of their strong market position.

§ Includes one bank which follows this practice "occasionally."

¶ Does not include one bank which takes the compensatory balance into account only if it is above the minimum.

either through lower interest rates on loans or by making loans which they would otherwise not make.[17] Since for some depositors without a compensatory balance the imputed interest rate, apart from the bank's provision of free services, is zero, the very existence of an imputed rate for other borrowers means that there is discrimination.

The next explanation—that banks use the compensatory balance requirement to discriminate between prime rate customers—does not fare well. Again the test is partial, since we did not ask directly about prime rate customers. Rather, the banks were asked about the treatment of "particularly good and sound" customers. This question therefore tested not only for discrimination among prime rate borrowers, but also for discrimination among other classes of customers receiving the same interest rate. While some banks apparently do discriminate in this way, the great majority of them do not. Hence, such discrimination can form only a minor

[17] This is consistent with Gallot's findings (*op. cit.*, p. 314) that a majority of the hundred largest banks base the maximum size of a customer's loans on factors other than the size of his compensatory balance, and make up for a low compensatory balance by charging a higher interest rate.

Table 2

Rigidity of Compensatory Balance Requirement

Customers fail to maintain their compensatory balances at the proper level:	Banks with Deposits of (millions of dollars)		
	Percent		
	250 and over	100-250	Less than 100
Never	4	0	7
Almost never (less than 1 percent of cases)	9	33	40
Only occasionally (1-5 percent)	57	29	20
Fairly frequently (5-20 percent)	30	33	27
Quite frequently (over 20 percent)	0	5	7
Number of cases in sample	23	21	15
Bank's reaction to failure to maintain adequate balance.*			
Ignores it unless it happens too frequently	10	30	31
Asks for an explanation	49	30	8
Agrees to it if funds are used for urgent need	34	19	38
Agrees to it occasionally if funds used for urgent need, but usually does not allow it even then	10	19	15
Never allows it—will ask for higher interest rate on future loans	2	4	0
Never allows it—will be more critical of future loan applications	2	0	8
Never allows it—will never grant customer a loan again	0	0	0
Number of cases in sample †	41	27	13

* Respondents were asked to check several alternatives if applicable.
† Banks checking several alternatives counted as single case.

part of the explanation of compensatory balances. Similarly, the next explanation, that banks use varying compensatory balance requirements because of the stickiness of the prime rate, also fares badly, although it too does not fail completely.

Banks were also asked how frequently customers fail to maintain their compensatory balances at the proper levels. Table 2 shows that most banks administer the compensatory balance requirement in a flexible manner, thus supporting the view that compensatory balances are to a considerable extent precautionary balances.[18]

Thus our survey provides strong support for the view that banks pay an imputed interest rate on compensatory balances and hence discriminate among depositors. However, the theory that compensatory balance requirements are used to discriminate among prime rate borrowers and to make up for the stickiness of the prime rate gets only limited support—only a minority of the banks do so. Finally, the view that compensatory balances are used as precautionary balances obtains considerable support from Table 2, but it does not apply to all banks.

Let us now see how well our explanations of compensatory balances can account for the detailed characteristics of

[18] For corroborating evidence in the case of the hundred largest banks, see Gallot (*loc. cit.*).

such balances. The Federal Reserve study of business loans of member banks found that at least in some banks compensatory balance requirements are: [19]

(a) more general for large than for small firms.
(b) higher in large than in small banks.
(c) imposed more frequently in banks extending lines of credit than in other banks.
(d) more frequent for unsecured than for secured loans.
(e) more common for companies outside the bank's trading area.[20]
(f) more rigidly enforced and standardized for sales finance companies.
(g) imposed by some banks only on sales finance companies.[21]
(h) lower for sales finance companies than for other borrowers.
(i) higher at larger banks for sales finance companies.
(j) lower in the West than in the East.

In addition, there is evidence that the compensatory balance requirement becomes more frequent in periods of tight money and less frequent if there is strong competition in the money market.[22] And according to Roland Robinson, compensatory balances are imposed more generally on borrowers who have a line of credit than upon occasional borrowers.[23]

Many of these characteristics can be accounted for by our four explanations. The fact that compensatory balance requirements are more common for large firms than for small ones can easily be explained. First, the deposits of large firms are probably more interest elastic than those of small firms, since large firms, presumably with large balances, find it worth while to "shop around." Hence, banks have to pay them imputed interest on their balances, and there is thus an incentive to discriminate.[24]

Second, since large firms are much more likely to receive the prime rate than are small firms, both the desire to discriminate among prime rate borrowers, and the attempt to compensate for the stickiness of the prime rate can account for the greater frequency of compensatory balances among large firms.[25]

The greater tendency to require compensatory balances from firms outside the bank's normal trading area can also be explained by a need to pay a higher imputed rate of interest on deposits of such customers, since such firms usually have alternative banking facilities readily available and therefore have a higher supply elasticity of deposits.

Then there are three characteristics relating to sales finance companies. The fact that they are more prone to compensatory balance requirements than other borrowers can be explained by their greater market power. Since they deal with many banks, they have a relatively high supply elasticity of deposits, and

[19] Cagle, *op. cit.*, pp. 576-579.

[20] Gallot found that 30 percent of the hundred largest banks discriminate between local and national borrowers, and that the majority of these had more lenient requirements for local customers (*op. cit.*, p. 312).

[21] Separate requirements for sales finance companies are least common in the largest banks.

[22] See Westerfield, *op. cit.*, pp. 258-259.

[23] See Robinson, *op. cit.*, pp. 105-109.

[24] Admittedly firms may change their banks infrequently, but such customer attachment does not reduce the elasticity of demand. While it makes it more difficult for the bank to lose a customer, once it has lost him, it has lost him for good. In general, price elasticity is not reduced by customer attachment as long as the customer makes his original choice on the basis of price.

[25] It has been shown above that these two explanations are applicable in only a limited number of banks, but they may well be applicable in enough cases to explain, at least in part, the greater frequency of compensatory balances among large firms. Since we do not know how much greater this frequency is, we cannot say whether these two explanations are sufficient.

hence banks must pay an imputed interest charge on their deposits. On the other hand, compensatory balance requirements for sales finance companies, although more frequent, tend to be lower than for other firms. This can be explained by banks shaving the prime rate to these companies. Thus, our analysis can explain both why these requirements are more frequent for sales finance companies and why they tend to be smaller.

The final characteristic of sales finance company compensatory balance requirements is that they tend to be higher at larger banks. This can be explained by differences in the degree of market power. Since large sales finance companies find it expensive to borrow from many small banks instead of from a few large ones, large banks have more power over sales finance companies than do small banks.[26] But since, apart from rate shaving, the prime rate is the same at all banks, this difference results in higher compensatory balance requirements at large banks, i. e., in less prime rate shaving at large banks.

Tight money stimulates the use of compensatory balances. Perhaps this can be explained to a limited extent by the fact that tight money makes the prohibition of interest payments on demand deposits more burdensome for banks. Therefore, there is a greater use of compensatory balances to avoid this restriction.[27] In addition, if interest rates are high, there may be more of an incentive to discriminate among depositors, because some depositors would ignore this rise in interest rates, while others would be fully conscious of it. Finally, it is possible that, with higher interest rates, firms are more willing to hold precautionary balances, in spite of their higher costs, because of the greater difficulty of borrowing.

The greater tendency of city banks than of country banks to require compensatory balances can be explained, at least in part, by the fact that city banks tend to have larger customers.

To summarize—we have suggested four reasons for the existence of the compensatory balance requirement: discrimination among suppliers of deposits; discrimination among recipients of the prime rate; the attempt to offset the inflexibility of the prime rate; and finally, the use of compensatory balances as precautionary balances. And our survey of banks has shown that in most cases banks do pay imputed interest on compensatory deposits. Hence, at the very least, there is discrimination between borrowing and nonborrowing depositors. Although in a distinct minority, some banks stated that they use compensatory balances as a way of differentiating among prime rate borrowers. A minority also reported that they used compensatory balance changes to compensate for the stickiness of the prime rate. These two explanations are therefore of only quite limited validity. Finally, a significant proportion of banks allow customers to treat their compensatory balances as precautionary balances. In addition to this evidence, our theory gains acceptability by its ability to account for many of the detailed characteristics of the compensatory balance requirement. And insofar as we cannot account for the others, this may reflect, not a weakness of our theory, but merely our ignorance about banking practices.

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[26] Competition among large banks for the loan business of sales finance companies is limited by the legal restriction on the amount a national bank may lend to one customer. For a good discussion of the relation of banks to sales finance companies, see Donald P. Jacobs, *op. cit.*, pp. 341-351.

[27] However, tight money was associated with a greater use of compensatory balances even before the prohibition of interest on demand deposits. (See Howard Whipple, "The Average Balance Theory: Is it Justified?" *American Bankers Association Journal*, May 1931, p. 940.) Unfortunately, Whipple's definition of compensatory balance is broader than the one used here, since he includes balances *held even* at times when there is no loan outstanding.

► ALLAN H. MELTZER

A Weekly New Issue Yield Curve for Municipal Bonds

Presently available information on municipal bond[1] yields comes from a variety of sources. Weekly yields published by the Bond Buyer, Moodys, Dow Jones and others are frequently quoted and used as indexes of current market performance. Monthly yields published by Moodys and the Investment Bankers Association (IBA) are used for similar purposes. The methods of computation employed in the construction of each of these series differ. As a result, they convey quite different information about the performance of the municipals market.

In the present paper, I describe a method of constructing a weekly index of municipal bond yields based upon current quotations. Observations for maturities of five, ten and twenty years are presented. The proposed yield series for twenty year bonds is compared to the weekly Bond Buyer and Dow Jones indexes as well as to the yield on long-term governments. The monthly average of the weekly index is then contrasted with the IBA monthly series for five, ten and twenty year maturities. It appears that the proposed series improves upon present sources of information on average weekly yields in the market for municipal issues and compares reasonably well to the IBA monthly series.

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[1] The term municipal bonds is used to refer to general obligations of state and local governments. The present paper was written while the author was a consultant to the U. S. Treasury. The views expressed are those of the author and not those of the U. S. Treasury Department.

Table 1

Proposed Index—1960

Week Ending	Maturity			Week Ending	Maturity		
	5 years	10 years	20 years		5 years	10 years	20 years
1/8	3.41	3.69	3.96	7/8	2.90	3.25	3.60
1/15	3.40	3.66	3.92	7/15	2.95	3.34	3.68
1/22	3.31	3.55	3.76	7/22	2.93	3.31	3.62
1/29	3.28	3.51	3.80	7/29	2.84	3.21	3.52
2/4	3.21	3.41	3.75	8/5	2.62	3.08	3.38
2/11	3.16	3.39	3.68	8/12	2.54	3.02	3.45
2/19	3.12	3.33	3.53	8/19	2.43	2.93	3.40
2/26	3.17	3.43	3.64	8/26	2.42	2.89	3.29
3/4	3.18	3.45	3.70	9/2	2.38	2.90	3.41
3/11	3.16	3.41	3.61	9/9	2.45	2.95	3.42
3/18	3.09	3.31	3.55	9/16	2.43	2.97	3.40
3/25	3.08	3.34	3.56	9/23	2.48	3.01	3.51
4/1	3.04	3.29	3.56	9/30	2.57	3.09	3.68
4/8	3.03	3.26	3.57	10/7	2.61	3.16	3.61
4/15	3.03	3.29	3.58	10/14	2.63	3.14	3.60
4/22	3.11	3.39	3.69	10/21	2.56	3.09	3.63
4/29	3.10	3.38	3.61	10/28	2.48	3.03	3.48
5/6	3.10	3.37	3.60	11/4	2.43	2.94	3.44
5/13	3.05	3.30	3.56	11/11	2.44	2.99	3.58
5/20	3.04	3.33	3.64	11/18	2.38	2.90	3.38
5/27	3.13	3.42	3.66	11/25	2.37	2.92	3.44
6/3	3.00	3.27	3.52	12/2	2.49	3.03	3.53
6/10	2.95	3.24	3.51	12/9	2.44	2.96	3.44
6/17	2.94	3.24	3.54	12/16	2.40	2.94	3.48
6/24	2.91	3.25	3.51	12/23	2.33	2.86	3.42
7/1	2.98	3.32	3.65	12/30	2.37	2.89	3.48

The proposed index of weekly new issue yields shows week to week changes in yields of much greater amplitude than the measures commonly employed. In addition, it leads both the Bond Buyer index and the Dow Jones index at upper and lower turning points. The comparison with U. S. government bond yields shows that the proposed municipal yield series lags the yield on governments by one week at most. This close correspondence between changes in municipal and government yields suggests that the lag in transmission of monetary policy from one bond market to another is quite short.

Finally, it should be noted that the proposed index is easily computed, given the information presently available to the market. Thus it becomes feasible to provide current data on the maturity structure of state and local bond yields. As further experience with the maturity structure of municipal yields is obtained, it should become possible to develop better understanding of the determinants of short-term maturity structure.

I. *Method of Constructing the Proposed Index*

Information is presently available weekly on the value, maturity structure, and reoffering yields of virtually all new issues of municipal bonds. Weighted averages of these data have been computed for three points on the yield curve—5, 10, and 20 years—for each of the four highest

Table 1 (Continued)

Proposed Index—1961

Week Ending	5 years	10 years	20 years	Week Ending	5 years	10 years	20 years
1/6	2.43	2.97	3.50	7/7	2.60	3.09	3.58
1/13	2.45	3.00	3.61	7/14	2.56	3.09	3.59
1/20	2.44	2.97	3.46	7/21	2.53	3.04	3.57
1/27	2.44	2.96	3.45	7/28	2.51	2.99	3.46
2/3	2.37	2.90	3.38	8/4	2.54	3.05	3.49
2/10	2.40	2.91	3.39	8/11	2.56	3.03	3.52
2/17	2.35	2.85	3.30	8/18	2.62	3.17	3.66
2/24	2.30	2.79	3.35	8/25	2.53	3.08	3.56
3/3	2.35	2.83	3.32	9/1	2.52	3.07	3.61
3/10	2.43	2.93	3.48	9/8	2.63	3.12	3.56
3/17	2.48	3.02	3.57	9/15	2.58	3.12	3.61
3/24	2.50	3.02	3.52	9/22	2.55	3.05	3.57
3/31	2.53	3.03	3.54	9/29	2.51	3.04	3.53
4/7	2.53	3.07	3.66	10/6	2.48	3.02	3.52
4/14	2.51	3.04	3.56	10/13	2.48	2.98	3.47
4/21	2.52	3.07	3.52	10/20	2.45	2.96	3.46
4/28	2.46	3.00	3.50	10/27	2.43	2.94	3.43
5/5	2.42	2.91	3.53	11/2	2.41	2.93	3.38
5/12	2.42	2.90	3.50	11/10	2.40	2.93	3.41
5/19	2.34	2.88	3.39	11/17	2.43	2.97	3.47
5/26	2.43	2.96	3.43	11/24	2.48	2.97	3.52
6/2	2.52	3.00	3.49	12/1	2.52	3.00	3.52
6/9	2.54	3.07	3.55	12/8	2.47	2.98	3.53
6/16	2.53	3.08	3.54	12/15	2.48	3.01	3.50
6/23	2.50	3.04	3.51	12/22	2.43	2.93	3.44
6/30	2.54	3.07	3.58	12/29	2.39	2.90	3.46

rating classes—Aaa, Aa, A, and Baa.[2] The method of compuation is applicable to maturities other than these three and may be used to construct a yield curve for newly issued municipal bonds in each rating class.

For the maturity classes used here, the weekly yields were based on the average Aa and A yields only. Aaa and Baa bonds have not been used in the computed series because of the relatively large variance of the number and value of such issues marketed weekly. Quite frequently there are no new issues of Aaa or Baa bonds in a given week. Including them in the computational procedure requires extrapolation within a volatile series. The comparisons below suggest that the omission of these issues from the computed series does not seriously distort the computation.

[2] The particular data used as the basis for the computations described here were obtained from Rand & Company, New York. I am indebted to them for supplying the weighted averages for several rating classes.

The computation of the weighted average yield for a specific maturity class, j, rating class, k, in week, t, is obtained as follows:

$$r_{j,k,t} = \sum_{i=1}^{n} \frac{v_{i,j,k,t}\, r_{i,j,k,t}}{\sum_{i=1}^{n} v_{i,j,k,t}}$$

where $r_{j,k,t}$ is the weighted average reoffering yield for a particular maturity, rating class, and week, v is the value of the issue and the index, i, refers to the individual municipality or state—i.e., to the particular issue.

Two alternative methods of combining the averages for particular rating classes into a single index were considered. One set, based on the dollar volume of municipal issues, suggested that the relative values of Aa and A bonds issued are equal. The other set of weights was computed from the relative number of issues and suggested a weight of .4 for Aa and .6 for A bonds. The latter set of weights more closely approximated the IBA monthly series for 1960 and was used in the computation.[3] In the future it may be necessary to change these weights, if there are more than moderate changes in the relative flows of bonds by rating classes.

The index presented in Table 1 and used in this paper is therefore computed by taking .6 of the weekly weighted average of A yields and adding .4 times the weighted average of the Aa yields for each of the three maturity classes.[4] This will be referred to as the computed or proposed index.

II. *Comparison of the Proposed Index, the Bond Buyer Index of 20 Bonds, and the DJ Municipal Index*

The Bond Buyer's index of 20 bonds is constructed from issues in the top 4 rating classes, so that the "average rating of the 20 bonds . . . . falls midway between the four top rating groups as classified by recognized rating agencies."[5] In this respect, it is similar, but not identical, to the proposed index which is based on Aa and A bonds only and is somewhat closer to the A than to the Aa yield. More important, the proposed index is based on new issue yields, while the Bond Buyer index (hereafter BB) is computed from dealer quotations of the yield that particular issues would have if marketed on the current day. Since the BB is based on issues with 20 years to maturity, I have limited comparisons here to the computed 20 year index and the years 1960-61. In a later section, the relative performance of the two measures in 1962 will be considered.

The mean values of the computed index for 20 year maturities and the Bond Buyer index are 3.53 and 3.48, respectively, for the two years. This suggests that on the average the two measures provide information about the same level of interest rates, despite the differences in method of construction. However, the movement of the two measures are quite different both with respect to the size and to the frequency of changes in direction. These are summarized below under the headings (a) volatility of movement and (b) changes in the direction of movement.

Before considering these details, we note that there is little reason to prefer a more volatile to a less volatile series in the absence of independent information about the expected behavior of the series. Such independent evidence—the response to the change in Regulation Q—is examined below where the 1962 data are discussed. The findings there suggest that the response of the proposed index to market changes is substantially greater than the response of the Bond Buyer index. Moreover, the data here indicate that the proposed yield series leads both the BB and the DJ at turning points, sometimes by several weeks. I suggest that the information provided by the proposed index is more current than similar information taken from the BB or the DJ.

A. Volatility

The computed index fell by .50% from early January 1960 to late December 1961; the BB series declined by .34%. On

[3] The weights were obtained from IBA data for 1957-58. Cf. *IBA Statistical Bulletin*, August 1959.

[4] Specifically, $.4r_{j,2,t} + .6r_{j,3,t} = r_{j,t}$, the average yield of a particular maturity in a particular week. Here $j = 5, 10, 20$ are the maturity classes, $k = 1, \ldots 4$ are the rating classes and t refers to the particular week.

[5] *The Daily Bond Buyer.*

the average the two series differed by only .05%, as noted. However, in the process of falling by .50%, the computed series showed negative weekly changes which sum to −3.42 and positive weekly changes of 2.92 over the two year period. This is an average weekly change of .067 in absolute value. For the year 1961 alone, the computed index shows little change, but this lack of change is composed of positive changes of 1.32 and negative changes which sum to −1.34, or an average weekly change (ignoring signs) of .05. The BB index shows an average absolute weekly change of .027 for the two year period and .023 for 1961.

When we consider the number of weeks in which the indexes record no change, we find that the BB remains unchanged in 30 of the 103 weeks while the computed series remains unchanged in only 3 weeks. Thus, it is clear that, despite the similar mean values, the two series behave quite differently and that the computed index is the more volatile of the two. This latter fact creates some problems in comparing the turning points.

B. Changes in Direction

A comparison of a volatile series in terms of leads or lags suggests that the two series turn at approximately the same time. In this case, the proposed index shows several changes in direction which are not recorded by the BB. Some of these occur when the BB shows no change in either direction; others are found when the BB series continues to rise or fall while the proposed series temporarily reverses direction. Since the BB may remain unchanged for three or four consecutive weeks, measurement of turning points was restricted to those periods in which *both* series recorded a change in direction.

For the two year period 1960-61, 18 changes in direction were available for comparison. These have been summarized as follows:

Table 2

	Frequency	
	Rising	**Falling**
Same week	3	3
BB lags 1 week	3	2
BB lags 2 weeks	2	2
BB lags 3 weeks		1
BB lags 0 or 2 weeks*	1	
BB lags 1 or 4 weeks*		1
Total	9	9

*The Bond Buyer index changes from rising (or falling) to no change. At the end of the specified number of weeks it moves in the same direction as the proposed index.

This comparison suggests that on the average the BB lags the proposed index by 8/9 of a week when the proposed index rises and by 1-2/9 weeks when the proposed index falls.

On the average the proposed index changes direction earlier than the BB index. During the two year period shown in the table, the proposed index never turned in either direction after the BB index. It is slightly faster (by ⅓ week) when recording a fall in yield than when recording a rise in yield. As noted above, the proposed index is subject to much larger weekly change. Thus the movements which it recorded appeared earlier and were from 2 to 2½ times larger on the average than those recorded by the BB.

C. The Dow Jones (DJ) Index

The Dow Jones Index attempts to record the weekly yield of a bond with an average coupon of 4.16%. I have not compared the computed index to the DJ index in as much detail, but the following table records the timing of direction changes in the two series. A total of 22 direction changes were available, since the DJ changed direction more often than the BB.

Table 3

	Frequency	
	Rising	Falling
DJ leads 1 week	1	
Same week	4	4
DJ lags 1 week	3	
DJ lags 2 weeks	3	5
DJ lags 3 weeks		1
DJ lags 1-3 weeks		1
Total	11	11

Table 4

	Frequency	
	Rising	Falling
Government lags 2 weeks		1
Government lags 1 week	2	
Both change in the same week	3	
Government leads 1 week	5	8
Government leads 2 weeks		
Government leads 3 weeks		1
Total	10	10

The 22 direction changes in the two series suggest that there may be a short cyclical movement in municipal bond yields superimposed on the longer cyclical movement in the economy. The present series is too short to provide valid estimates of the length or timing of the short cycle. But the data in the table again suggest that the proposed series generally leads the older series when yields are both rising and falling. On the average, the DJ lags by 6/11 of a week when both yields rise, and by 15/11 weeks when both yields fall. Thus, for the two year period, the DJ rose earlier than the BB and fell later than the BB, and both rose and fell later than the computed index. During the two year period considered here, the DJ, like the BB, fell by .34 or by 2/3 of the fall in the proposed index. It appears that the proposed index is more responsive to weekly changes than either the DJ or the BB.

III. *Relation of the Proposed Index to the Weekly Government Bond Yield*

The close correspondence between changes in government and corporate and municipal bond yields has often been noted. Such correspondence reflects the mechanism by which changes in economic conditions, monetary policy, or the relative demands of bondholders for particular types of bonds are transmitted from one market to the other. If the rate at which new municipal or corporate bonds are issued depends, *cet. par.*, on the current market yield of the bonds, the shorter the lag between the change in government yields and other bond yields, the more rapid the change in the rate at which new bonds are issued and the corresponding increase or decrease in real output.[6]

The Friday closing bid price of U. S. 3½'s of '90 was taken as a measure of weekly changes in long-term government bond yields. A comparison of directional changes in the proposed yield and the government yield suggests that on the average (and in 80% of the cases), the proposed yield index changes in the same direction as the government yield with a lag of no more than one week.

Arithmetic suggests that the corresponding relation between government yields and the BB or DJ is about 2 weeks. In any case, the data suggest that the municipals market responds rapidly to factors influencing changes in government yields, or to the changes in government yields themselves. These results are not inconsistent with a high cross-elasticity of demand for securities with respect to interest rates on alternative securities—

[6] This is, of course, but one of the many lags between securities markets and product markets.

Table 5

Probability of the Difference (Mean—Median)

Negative				Between		Positive			
−.31	−.21	−.11	−.01	.01	.11	.21	.31	.41	.51
& −.40	& −.30	& −.20	& −.10	& .10	& .20	& .30	& .40	&.50	& above
.018	.080	.284	.620	.445	.260	.151	.062	.026	0.50

an implication that has been denied frequently by those who explain the observed performance of security markets solely in terms of institutional factors.

IV. *Comparison of IBA Monthly Yields and Monthly Averages Of the Proposed Index*

For several years, the IBA has computed the median yields for each of the four highest rating classes and three maturity classes. These computations are based on the same underlying data which are used in the construction of the Rand weighted averages. Differences between *monthly* weighted averages for each rating class using the Rand data and the IBA median yield for that rating class can only reflect computational differences. Thus this section provides a check on the procedure used for the proposed index.

Under what conditions will such differences appear? If the distribution of bond yields on newly issued municipals is symmetric within a particular rating class (e.g., normally distributed), the median and the mean will be equal. However, it is quite likely that rating classes are not defined narrowly enough to prevent certain types of issues within a particular quality or rating class from consistently selling at higher or lower yields. In a detailed study of the IBA series on Aa rated general obligations, I found that the monthly mean for 20 year maturities generally exceeded the median during the sixty months 7/56–6/61. In only 8 months, the mean yield on 20 year Aa general obligations issued during the month was less than the median yield. In two months the mean and the median were equal; the remaining fifty months showed mean yields which exceeded the median yields. On the average for the sixty months, the mean yields were .026 larger than the medians, suggesting that the distribution is slightly skewed.[7]

By definition the median is the midpoint of the distribution. Hence the *number* of negative and positive deviations are equal. Since the size of the deviations is not equal, the probability of a large positive deviation is greater than the probability of a large negative deviation. This is shown in Table 5 above where the conditional probability of a deviation of given size is computed. The probabilities on the right side measure the chance that there will be a positive deviation of a certain size provided that there is a positive deviation. (The probabilities on the right and left each sum to one rather than the sum on the right and left together equalling one.) It is clear from the table that the chance of finding a large positive deviation in the Aa series is much greater than the chance of finding a negative deviation of the same size.

[7] For additional evidence on the shape of the distribution, cf. *IBA Statistical Bulletin*, July 1958.

Table 6

Differences IBA Index—Proposed Index Monthly by Maturity*

Month	5 year Maturity	10 year Maturity	20 year Maturity
	1960		
January	—.02	0	0
February	.02	.03	.15
March	—.01	.03	.06
April	.02	.02	.01
May	0	.06	.02
June	.01	.05	.03
July	—.03	—.02	—.04
August	—.01	.03	—.03
September	.05	.03	—.02
October	.03	.01	—.07
November	—.02	0	—.07
December	0	.01	—.02
	1961		
January	0	—.04	—.02
February	0	.01	.06
March	—.01	.03	.02
April	.01	.02	—.02
May	.04	.04	—.02
June	.05	.01	.05
July	—.04	.01	—.01
August	—.02	0	0
September	—.06	—.04	—.02
October	—.02	—.03	—.02
November	.03	.03	.06
December	0	.06	.02

* Monthly averages for the proposed index were computed for whole weeks. No attempt was made to split weeks within months to correspond to the IBA series.

Two conclusions are based upon this discussion. First, since the distribution is not symmetric, it does not follow that the proposed index and the IBA data which are both based on the same observations will necessarily produce the same series for any particular rating class. Second, it does not follow that the mean of the proposed index must be greater than the mean of the IBA series for each maturity class. The IBA series for each maturity class is a simple average of the medians for the four rating groups. The mean for some rating groups may be above the median; for others it may be below the median. The simple average of the medians may produce an index which is either positively or negatively skewed on the average. And of course the direction in which the IBA index is skewed may change from month to month.

With that introduction, I present Table 6 showing the differences betwen the IBA index and the proposed index monthly for calendar years 1960-61. The differences shown in this table were computed by subtracting the proposed index from the IBA index. Note that for 20 year maturities all but one of the differences are within the average week to week change in the proposed index, .068, given above.

Finally, Table 7 summarizes the information shown on the preceding page for the 24 months. From these results it appears, first, that the proposed index is slightly lower than the IBA index and that the difference is greatest for the ten year maturity class. Second, the data suggest that the variance of the difference between the two series rises with the maturity of the bonds.

However, the close correspondence between the series is quite striking, particularly when it is recalled that the IBA series is based upon all four maturity classes while the computed index is constructed by weighting the weighted averages for only two of the rating classes—Aa and A. It appears that the proposed index generally moves in close correspondence to the IBA new issue series and provides reasonably accurate information

Table 7

	5 year Maturity	10 year Maturity	20 year Maturity
Mean Deviation	.0008	.0146	.0071
Mean Deviation Ignoring Signs (Mean of the Absolute Devs.)	.021	.024	.033

Table 8

A Comparison of the BB and Proposed Index of 20 Year Maturities in 1962

Week Ending	Proposed Index	Change in Proposed Index		BB	Change in BB Index	
1/5	3.44			3.38		
1/12	3.34			3.36		
1/19	3.34			3.35		
1/26	3.27			3.27		
2/2	3.17			3.22		
2/9	3.17	Trough	#1 − .27	3.21		
2/16	3.18			3.20	Trough	#1 − .18
2/23	3.20			3.21	Peak	#1 + .01
3/2	3.25	Peak	#1 + .08	3.20		
3/9	3.17			3.15		
3/16	3.11			3.12		
3/23	3.12			3.12		
3/30	3.14			3.12		
4/6	3.12			3.10		
4/13	3.12			3.08		
4/20	3.04			3.04		
4/27	3.01			3.02		
5/4	2.97	Trough	#2 − .28	3.00		
5/11	3.04			3.00	Trough	#2 − .21
5/18	3.10		+ .17	3.10		+ .10

about the weekly movement in the yield curve for newly issued general obligations.

V. *A Comparison of Weekly Movements in BB and the Proposed Index in 1962*

On December 1, 1961, the Board of Governors announced a change in Regulation Q which permitted member banks to pay higher interest rates on time deposits. The change became effective on January 1, 1962. To cover the higher interest payments expected to result from the higher rates and the increased volume of time deposits, commercial bankers attempted to increase portfolio yields.[8] A major direction of portfolio changes was a shift into tax-exempt bonds.

Some measures of the response of the municipal bond yield indexes to the change in underlying market conditions can be obtained from the data for this period. The proposed index of yields on 20 year maturities changed little from early October to late November. In the week ending 12/15, i.e., within two weeks of the announced change in Regulation Q, the proposed index fell. The BB did not fall until the following week; i.e., it lagged the proposed index by the customary amount. From the table, "Weekly Reporting Member Banks," in the *Federal Reserve Bulletin*, we observe that the account "other securities" increased sharply in the week ending 12/13. Municipal bond holdings constitute a large part of this account. This suggests that the proposed index responded synchronously to —and the BB index lagged one week

[8] The fact that these yields were available earlier is irrelevant. The shift of deposits into time accounts reduces the probability of deposit withdrawal. A bank's demand for assets with longer maturity depends on the size of expected reserve drains.

behind—the increased demand for municipal bonds by commercial banks.

Thereafter the picture becomes more difficult to follow. The initial response of banks sharply reduced the "visible supply" and the "unsold balance in major bond accounts" recorded by the *Bond Buyer*. Presumably, the fall in yields set off changes in desired portfolios by other institutions and prompted an acceleration in the sale of new issues in the market. We do know that "unsold balance," which had fallen sharply in early January, rose during February. A somewhat similar movement is shown by the "visible supply." We should expect that, other things being equal, these two events would exercise a downward pressure on bond prices in February. Such pressure is faithfully recorded by the proposed index which rose during the month. The BB index shows little more than a sidewise movement throughout the month of February. This difference in response again increases our interest in the proposed index. More details of the comparative performance of the proposed rates and the BB are given in Table 8.

Had the proposed index been available during 1962, it would have shown the reversal of direction in the municipals market in early February and another change in early March. It appears that this information, computed from new issue yields, more faithfully and at an earlier date, records directional changes in the municipals market. Such information is of value to traders, investment houses, state, local, and federal officials. It is to be hoped that the ease of computation will encourage one of the interested groups to make these measures of yields for various maturities available on a regular basis.

► STANLEY SILVERBERG

Profitability of Commercial Bank Time Deposits

During the past few years several writers [1] have examined the profitability of commercial bank time deposits, and the December 1961 modification of Regulation Q has stimulated additional interest in this subject. It has been alleged that commercial banks could improve their earnings by getting out of the time deposit business.[2] Obviously, this view runs

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[1] D. A. and C. P. Alhadeff, "The Struggle for Commercial Bank Savings," *Quarterly Journal of Economics*, February 1958, pp. 1-22; "A Note on Bank Earnings and Savings Deposit Rate Policy," *Journal of Finance*, September 1959, pp. 403-410; Joseph Aschheim, "Commercial Banks and Financial Intermediaries: Fallacies and Policy Implications," *Journal of Political Economy*, February 1959, pp. 59-71; Deane Carson, "Bank Earnings and the Competition for Savings Deposits," *Journal of Political Economy*, December 1959, pp. 580-588; William G. Dewald, "Bank Earnings and the Competition for Savings," *Journal of Political Economy*, June 1961, pp. 279-282; Allan R. Drebin, "Bank Earnings and Savings Deposits—A Comment," *Journal of Political Economy*, June 1961, pp. 283-285; Paul M. Horvitz, "Close Look at Bank Earnings," Federal Reserve Bank of Boston *New England Business Review*, August 1959; "Bank Earnings and the Competition for Savings: A Further Comment," *Journal of Political Economy*, February 1962, pp. 86-87; Leland J. Pritchard, "Commercial Banks and Financial Intermediaries: Fallacies and Policy Implications—A Comment," *Journal of Political Economy*, October 1960, pp. 518-522.

[2] This is the view of Pritchard, *op. cit.* It is also the view suggested, given certain assumptions, by Deane Carson, *op. cit.*

counter to that suggested by the behavior of commercial bankers, who for the most part have stepped up their efforts to gain time deposits in recent years. This paper examines the determinants of the profitability of time deposits for the individual commercial bank and for the banking system as a whole, and calls attention to certain time deposit costs that may have been neglected. While certain values are suggested for the variables determining time deposit profitability, these are intended merely to be illustrative and suggestive. Whether bank time deposits are profitable will depend upon the individual bank and the period in question.

I. *Capital Cost of Deposits*

Assume that a bank has capital of K, derived from the sale of stock and from retained earnings, and a single kind of deposit, D. The bank earns a return, I, on its capital funds and a margin, M, on deposits, reflecting the difference between interest earned on deposit-derived funds and the various expenses associated with lending activity and with receiving and retaining deposits. Thus, the bank's earnings are KI + DM, and the rate of return on the bank's capital equals $I + \frac{D}{K} M$ or I + X(M) where X is the ratio of deposits to bank capital. Bank premises—in most cases only a modest fraction of K—can be ignored, or it can be assumed that physical facilities are rented and the rent charged to deposit and investment expenses.

Presumably, there is some minimum *required rate of return* or *capital cost* which a bank must earn to justify its capital investment. This return may be reflected in the stock market, estimated by management, or perhaps passed on by rule-of-thumb. Roughly, this rate may be considered to be the return that must be earned so that the market will place a value on the bank's stock at least equivalent to the bank's capital investment.

It is apparent from the above formula that the rate of return on bank capital is importantly affected by the bank's capital-deposit ratio. Other things being equal, a bank will raise its return on capital by increasing the ratio of deposits to capital. Whereas increased leverage through long-term borrowing probably raises the required rate of return on stockholder investment for *nonfinancial* corporations,[3] there is no apparent evidence that increased bank leverage (reduced capital-deposit ratio) significantly raises the capital cost to commercial banks.[4] Thus, banks generally can raise their return on investment by lowering their capital-deposit ratios, without incurring any offsetting reappraisal of their price-earnings multiple in the stock market.

The capital cost to commercial banks almost invariably will exceed the earnings increment that banks can expect by lending the proceeds of stock sales or retained earnings. Consequently, it appears that, if this were the only consideration, it

[3] Franco Modigliani and M. H. Miller, "The Cost of Capital, Corporation Finance and the Theory of Investment," *American Economic Review*, June 1958, pp. 261-296.

[4] David Durand ("Bank Stock Prices and the Bank Capital Problem," National Bureau of Economic Research, *Occasional Paper No. 54*, 1957) found that bank stock prices and their relationship to book value appeared to be determined by earnings and dividends, while such factors as the ratio of assets or risk assets to capital did not aid in explaining bank stock prices (pp. 3-6 and 17-19). Since Durand's study, bank stock prices have risen significantly relative to earnings, dividends and book value. However, earnings, dividends, and possibly the rate of earnings growth still appear to be the principal determinants of bank stock prices. Banks with high deposit-capital ratios do not appear to be penalized in the market to any significant degree. At the extremes (where the deposit-capital ratio is very high or very low) the market appears to penalize leverage slightly. But this probably reflects the possibility of earnings dilution through a future stock issue on the one hand and the possibility of earnings gains through increased leverage on the other.

would be in the interest of bank stockholders for banks to reduce their capital and their capital-deposit ratios indefinitely. However, bank tradition, concern on the part of some depositors, and pressures from regulatory authorities demand some minimum capital coverage to protect depositors and the FDIC from loss and to provide a high degree of safety to the payment mechanism. Hence, some minimum capital-deposit ratio may be considered a constraint on bank policy.

In practice, this minimum level will be influenced by a number of factors. Some of these may be related to the bank's asset mix, for this will influence appropriate or minimum levels set by regulatory authorities. The "minimum" level will tend to be affected also by factors such as the sensitivity of bankers to criticism, and their reliance upon regulatory authorities for favorable rulings on branching, mergers, and operating policies. However, it will still be in the interest of bank stockholders for banks to keep their capital-deposit ratios as close to the constraint level as possible.[5]

The combination of the capital constraint and the required rate of return on capital investment (R) gives rise to a minimum return that banks must earn on deposit-derived funds. This can be expressed by the inequality, $M \geq \frac{R - I}{X}$. Suppose that R, the required rate of return on bank capital is 14 percent before taxes; I, the return on investment funds is 6 percent; and X, the maximum ratio of deposits to capital, is 15. The minimum margin that must be earned on deposits is then $\frac{R - I}{X} = \frac{.14 - .06}{15} =$ .00533. That is, using the assumed numerical values, a bank would have to earn a margin of 0.533 percent before taxes on deposits in order to justify seeking and retaining them. This figure can be considered to be an estimate of the bank's *capital cost of deposits.*

The question arises, how meaningful is this concept—capital cost of deposits—as a practical guide to bank policy? First, it must be realized that banks generally cannot adjust their capital accounts quickly in response to seasonal or even cyclical variations in deposit growth. Consequently, the ratio of deposits to capital can be expected to fluctuate. In an extreme case, where some minimum capital coverage is viewed as a constraint on bank policy, a bank would have to operate normally (probably, at all times) at a deposit-capital relationship that is less than optimal. However, commercial banks are not likely to view any capital requirement in absolute terms. Rather, most bankers probably think in terms of some target optimum that presumably *will* be exceeded occasionally—perhaps as often as not. Consequently, it will be more meaningful to consider X in the above formula as a general target level for the individual commerical bank.

II. *Time Deposit Profitability*

Let us now turn to the profitability of commercial bank *time* deposits. If M_t, the margin on time deposits, is substituted for M, the inequality derived in the previous section can be rewritten:

$$M_t \geq \frac{R - I}{X}.$$

But this presupposes that the origin of all time deposits is from sources other than existing bank deposits. Actually, however, some time deposits represent bank funds obtained at the expense of demand deposits of the same or of other commercial banks.

Let us define P to be the proportion of time deposits that arises at the expense

[5] This is *not* an implied defense of a particular minimum capital-deposit ratio, or even a defense of the use or significance of the concept. As long as banks consider themselves constrained, however, then the capital-deposit ratio is basic to the calculation of the cost of deposits.

of demand deposits and M_d to be the earnings margin on demand deposits. The foregone demand deposit earnings per dollar of time deposits would be PM_d, and hence this term must enter the inequality. However, it is also necessary to take account of the fact that a reduction in demand deposits results in a lower capital cost. Adjusting for both these factors yields the inequality:

$$M_t \geq \frac{R - I(1 - P)}{X} + PM_d \quad [6]$$

III. *Source of Time Deposits*

Let us first consider the meaning of the term P in the above formula before considering its likely value. Suppose that commercial banks stopped taking time deposits after some given date, say, by initially converting all time deposits into noninterest-paying demand deposits. After a suitable period of adjustment (perhaps a year or two), what proportion of former time deposits would remain in demand balances; *i.e.*, by how much would demand deposits increase as a result of banks foregoing time deposits? Alternatively, suppose commercial banks had never offered time deposits. How much greater would demand deposits currently be? What would be the ratio of this figure to the present amount of outstanding time deposits?

In the case of an *individual* commercial bank located in a reasonably active financial center where other commercial banks offer time deposits, P is likely to be very close to zero. Those depositors who preferred time deposits would shift their funds to other commercial banks. Consequently, it probably makes sense for many individual banks to ignore the impact on *their* demand deposits that arises from *their* retaining and seeking time deposits. Thus, for the individual commercial bank, $\frac{R - I}{X_t}$ may indeed be a reasonable estimate of the earning margin necessary for time deposits to be profitable. But the questions posed in the preceeding paragraph remain interesting for evaluating the profitability of commercial bank time deposits as a whole.

The value of P would appear to depend upon the preferences of depositors and the behavior of monetary authorities. First, there is the matter of where holders of commercial bank time deposits would place their funds, if the time deposit option were not available to them. Some would continue to hold at least part of these funds at their commercial bank in the form of demand deposits. This might be the case where the depositor is ignorant of alternative asset holding media, has little access to competitive financial institutions, or desires to maintain some minimum deposit relationship with his bank to guarantee favorable loan treatment. However, most time depositors are likely to be aware of alternative outlets for their funds and probably would not be willing to forego a return on them. These depositors might be expected to shift most of their funds into marketable securities, savings bonds, or the liabilities of nonbank financial intermediaries.

In addition to the preferences of owners of financial assets, the volume of demand deposits is determined by the behavior of monetary authorities, *i.e.*, by the volume of reserves made available to

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[6] This formula assumes that the minimum capital-deposit ratio is not affected by the mix of demand and time deposits, an assumption which may not be appropriate. If we define X_d as the maximum ratio of demand deposits to bank capital and X_t as the maximum ratio of time deposits to capital, then, for any given bank, minimum capital would be $\frac{D}{X_d} + \frac{T}{X_t}$ where D equals demand deposits and T equals time deposits. Now we can rewrite the above inequality:

$$M_t \geq \frac{R - I}{X_t} - \frac{(R - I)P}{X_d} + PM_d.$$

commercial banks. The question arises, how would monetary authorities react to the elimination of time deposits? One conceivable possibility is that monetary authorities would keep the volume of member banks reserves constant. If this were the case, and if time-deposit holders desired to switch most of their funds into demand balances, then member banks would have insufficient reserves to support this desired expansion. Banks would have to reduce earning assets to make up reserve deficiencies, which would tend to contract demand deposits and offset much of the switching of former time deposit holders.

Suppose, instead, that most former time depositors shifted their funds into nonbank financial intermediaries or into direct security holdings. As banks liquidated earning assets to cover the deposit loss, they would ultimately find themselves with excess reserves, enabling them to retain or to reacquire some of these earning assets and hence to support an expansion in demand deposits. In either of these two cases, the amount by which demand deposits *could* increase would be the same—an amount equal to the product of total bank time deposits and the ratio of reserve requirements of time to demand deposits; *i.e.*, if reserve requirements are four percent for time deposits and about 16 percent for demand deposits, then demand deposits would tend to increase by about one-fourth of the amount of former time deposits. Note that this particular result is independent of the preferences of former or potential holders of time deposits.

Two other possibilities, in which the size of P would be largely independent of the preferences of financial asset owners, can be cited. Monetary authorities might choose to allow the total volume of member bank deposits to remain unchanged. For example, member bank reserves might be expanded sufficiently to enable bank demand deposits to increase enough to compensate for the elimination of time deposits. Alternatively, monetary authorities might choose to allow the volume of member bank earning assets to remain constant. If that policy were followed, monetary authorities would have to make a sufficient quantity of reserves available to enable member banks to expand their demand deposits by *more* than the amount of lost time deposits, since a dollar of time deposits supports a larger amount of bank earning assets than a dollar of demand deposits.

Three solutions, which are largely independent of the preferences of financial asset owners, have been suggested: that demand deposits will increase by about one-fourth of, by an amount approximately equivalent to, or by a greater amount than the time deposit decline. Stated in another way: P is ¼; one; or greater than one. *However, it is the opinion of the author that all of these solutions are largely incorrect; that, in fact, it is the preferences of time deposit owners (or would-be time deposit owners) which determine P.*

While monetary policy is implemented primarily through changes in member bank reserves, monetary policy is *not* concerned with regulating the volume of bank deposits *per se*, or even with regulating the volume of bank lending *per se*. Rather, monetary policy seeks to affect interest rates and credit availability in order to influence the level of spending in the economy. It is true that monetary authorities do this by affecting bank reserves, and hence bank lending and the volume of bank deposits. Insofar as household and business preferences shift *away* from commercial banks (say, toward nonbank intermediaries), then a larger share of credit creation will take place outside the commercial banking system. Stated otherwise, if there is a preference shift *away* from banks (a shift to the left in the demand for bank liabilities), then

monetary authorities will tend to reduce the volume of bank reserves. This will tend to be the case because less bank reserves and less bank credit and deposit creation will now be consistent with any desired level of monetary "ease" or "tightness." Conversely, a preference shift *toward* commercial banks will increase the volume of bank earning assets and deposits that is consistent with the desired tightness of monetary policy.

If former holders of time deposits desire to shift to demand deposits, then it would be reasonable to assume that monetary authorities would tend to facilitate the increase in demand deposits by supplying reserves to member banks; for this would be consistent with maintaining the same degree of monetary ease or tightness that prevailed before such a shift took place. But, if these same funds were to move away from banks, monetary authorities would tend to absorb the reserves freed by the lost time deposits.

This might appear to be attributing an undue amount of skill to monetary authorities, but this is not necessarily the case. It is sufficient for our purposes that monetary authorities pursue a policy geared toward some overall goal—whether this be some condition in financial markets, price stability, an employment target, or some combination of such goals. Monetary authorities might err by misreading indicators or by misusing theory, but errors presumably can arise regardless of the preferences of owners of financial assets. What *is* important for our purposes is that, in the long run, monetary authorities do *not* seek to regulate member bank growth in accordance with some predetermined formula regardless of financial conditions.

It is true that during relatively short periods (months, or an upward or downward phase of the cycle) monetary authorities may focus on the level of free reserves or the money supply, or commercial bank deposits in implementing monetary policy. However, over the longer run, shifts in preferences toward or away from commercial banks will bring about a situation where the reliance of monetary authorities on mechanical rules will give rise to undesired monetary ease or tightness. This will cause monetary authorities to discard their mechanical rules or to change them in such a way as to allow changes in bank reserves to reflect preference shifts of depositors and potential depositors. A reading of recent financial history strongly suggests that monetary authorities have behaved pragmatically, periodically adjusting to market conditions and ultimately trying to fit policy to goals related to the level of economic activity.[7]

Thus, it seems reasonable to assume that, in the long run, depositor preferences largely will determine the value of P. It is true that, indirectly, the behavior of monetary authorities might not be completely indifferent to changes in bank deposits and earnings assets. Since some imperfections exist in financial markets, shifts in the credit creation process away from commercial banks might harm the position of traditional bank borrowers. Conceivably, other financial assets might be appraised as less liquid than bank time deposits, so that some easing of bank reserves might have to accompany such a shift to prevent the development of tighter monetary conditions. However, such factors would modify only slightly the conclusion that P depends upon the preferences of owners of time deposits or potential time deposit owners.

For most commercial banks the earnings margin on demand deposits probably

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[7] Woodlief Thomas, "Recent Federal Reserve Policies—Aims and Achievements," (Address at the Vermont-New Hampshire School of Banking, September 11, 1961); Ralph A. Young, "Tools and Processes of Monetary Policy," *United States Monetary Policy*, American Assembly Columbia University, December 1958, pp. 13-48.

exceeds the margin on time deposits. As long as this is the case, the value of P becomes an important determinant of time deposit profitability. If, for example, the above relationship holds and P is close to 1.0, then time deposits clearly are unprofitable. Without explicitly examining the substitutability of demand and time deposits, Leland Pritchard assumes that bank time deposits arise primarily at the expense of demand deposits.[8] Such an assumption, of course, strongly implies that time deposits are *not* profitable.

Competition for savings between banks and other financial intermediaries suggests that P is substantially less than one. But assuming this to be the case and even assuming that P is relatively small does not establish the profitability of bank time deposits. *That* will depend upon the values assigned to the variables in the inequality

$$M_t \geq \frac{R - I(1 - P)}{X} + PM_d$$

IV. *Some Suggested Figures on Costs and Earnings*

Historical data do not afford the bases for any precise estimates of these variables. Commercial banks do not divide various operating and overhead expenses between demand and time deposits, at least for external consumption. And this is also true in the case of allocating earnings from loans and investments. Moreover, historical data do not give us an accurate picture of current earnings and expenses. With respect to bank earnings, historical data reflect loans and investments made over an extended period of time, rather than loan and investment opportunities confronting a bank at any given point in time or over some prospective period of time. In this sense, historical data would not necessarily give us an accurate picture of the current profitability of bank time deposits nor of their likely profitability in the future.

The writer cannot resist suggesting quantities for the variables relevant to gauging time deposit profitability for a "representative" bank. These are merely intended as suggestions to place the above inequality in better perspective, and they do not reflect the performance of any individual bank or the results of detailed statistical investigation. Also, the suggested asset mix and returns are not necessarily those available in current markets, but rather a rough approximation of the recent past and a guess of the near future.

First there is M_t, the margin on time deposits. Each dollar of time deposits might be allocated as follows:[9] .04 to reserves at the Federal Reserve; .16 to Treasury securities and various money market instruments; and .80 to loans and to investments in tax-exempt securities. The bank earns an average of three percent on its Treasury securities and 5.6 percent on its loans and other investments (including the taxable-equivalent yield on tax-exempt securities) after incidental expenses associated with lending, so that its total earnings are .16 (.03) + .80 (.056) = .0496, or 4.96 percent on time deposits. Average interest payment to depositors might run about 3.55 percent, and average servicing and administrative expenses might run about 0.60 percent on deposits so that the margin on time deposits, T = 4.96 − 4.15 = 0.81 percent.

The average dollar of demand deposits is divided as follows: .25 to required reserves, due from banks and float; .25 to Treasury securities and other money mar-

[8] Pritchard, *op. cit.*, pp. 518-522.

[9] These figures reflect the author's analysis of California bank data and efforts to modify these data to conform to earnings and expenses of banks generally. It is interesting to note that Paul Horvitz (*op. cit.*) found reasonably similar results in his examination of New England bank data.

ket instruments; and .50 to loans, tax-exempts and other investments. The net return is about three percent on Treasury securities and 4.9 percent on loans, so that total earning = .25 (.03) + .50 (.049) = .032, or 3.20 percent. Operating and overhead expenses after service charges might run about two percent of deposits so that D, the margin on demand deposits, would be approximately 3.20 − 2.0 = 1.20 percent.[10]

Assume that the capital cost on a before-tax basis is estimated to be about 14 percent, that the return on capital-derived funds is about 6.0 percent, and that X is 15. Ignoring the question of switching funds from demand to time deposits over which the individual bank has no control, the minimum required return on time deposits would be

$$\frac{R - I}{X} = \frac{.14 - .06}{15} = .00533,$$

which is less than our estimated margin $M_t = .0081$.

However, suppose the question is raised, are time deposits profitable for the commercial banking system as a whole, assuming that the figures suggested for the representative bank are appropriate? And assume initially that P = .20, that 20 percent of time deposits arise at the expense of demand deposits. Our inequality becomes

$$M_t \geq \frac{R - I(1 - P)}{15} + PM_d \text{ or}$$

$$\frac{.14 - .06(.8)}{15} + .2(.0120) = .00667.$$

The above inequality can readily be turned around and the question posed: Assuming given values for the other relevant variables, what values of P would be consistent with profitable time deposits? From the above formula we can derive

$$P \leq \frac{M_t X + I - R}{M_d X + I - R}.$$[11]

Using the numerical values suggested above, we get

$$P \leq \frac{.0081(15) + .06 - .14}{.012\ (15) + .06 - .14} = P \leq .415.$$

Thus, in the suggested example, time deposits are profitable as long as P does not exceed .415.

We can also relax our assumption that the maximum ratio of time deposits to bank capital (X_t) equals the maximum ratio of demand deposits to bank capital (X_d). However, it might be difficult to find general agreement with respect to deciding which value would be the larger of the two. Insofar as capital coverage is determined by so-called risk asset ratios, then X_t would probably be less than X_d. A larger share of time deposits generally is converted into risk assets, thereby suggesting a greater need for capital. On the other hand, greater deposit fluctuations that characterize demand deposits might be said to warrant greater capital coverage for them. Resolution of this issue can be left to monetary authorities and commercial banks. It is apparent, however,

[10] Treasury securities and various money market instruments afford a liquidity cushion to insulate against deposit and loan fluctuations. Liquidity requirements are greater for demand deposits and related commercial lending than for time deposits, and this largely accounts for the difference in the proportion of assets devoted to these items. Demand deposits are closely related to commercial lending, and many deposit accounts are tied to credit lines. Average rates on commercial loans tend to be lower than on real estate and consumer loans and longer-term tax-exempt securities—hence the lower return on loans matched against demand deposits. Expenses related to demand deposits vary considerably among banks. In the case of some of the larger wholesale banks in New York, where deposit accounts are relatively large, deposit servicing costs may average considerably less than 2 percent; but this is likely to be offset by lower loan rates on loans to prime commercial borrowers.

[11] Where $X_d \neq X_t$, the inequality would be

$$P \leq \frac{X_d(M_t X_t + I - R)}{X_t(M_d X_d + I - R)}.$$

that insofar as $X_d > X_t$ the required earnings margin on time deposits will be raised and the reverse will be true if $X_d < X_t$.

V. *Concluding Comment*

The figures suggested above are not intended to demonstrate the profitability of time deposits. Indeed, values of the relevant variables that seem appropriate to the writer give rise to fairly inconclusive results. And appropriate values will vary according to individual judgment and the bank and time in question. Our purpose has been to call attention to two factors determining the cost of time deposits and hence their profitability. These factors are the capital cost and the cost of foregone demand deposits earnings.

These same two factors are important in estimating the effect of changes in time deposit rates on bank earnings. Increasing time rates lowers M_t, the margin on time deposits, and can be considered analogous to lowering prices in product markets. Increased volume arising from higher time deposit rates (lower M_t) may or may not raise operating earnings on time deposits over some specified period of time. But to gauge the overall effect of higher time rates, it is also necessary to consider changes in *costs*. And here one must consider the cost of additional capital and any additional foregone demand deposit earnings arising from a larger volume of time deposits.

► BERNARD SHULL

Commercial Banking as a "Line of Commerce"

In *U. S. v. Philadelphia National Bank, et al.*, the Supreme Court held that Section 7 of the Clayton Act applies to bank mergers.[1] Section 7 makes unlawful any merger ". . . in any line of commerce in any section of the country, the effect" of which "may be substantially to lessen competition, or to tend to create a monopoly."[2]

In determining the probable competitive effect of a merger, it is necessary to define the market or markets which may be affected. "Determination of the relevant market," the Supreme Court has said, "is a necessary predicate to a finding of a violation of the Clayton Act because the threatened monopoly must be one which will substantially lessen competition 'within the area of effective competition.'"[3]

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[1] *U. S. v. The Philadelphia National Bank, et al.*, 374 U. S. 321 (1963).

[2] 15 U.S.C. § 18.

[3] *U. S. v. E. I. duPont*, 353 U. S. 593 (1957). Some critics have pointed out that markets cannot be defined independently of an examination of the competitive forces in the market. Market definitions ". . . must be integrated with the other analytical elements of the specific proceeding. A mechanical two-step operation—first defining the market and then examining competition in it—is not appropriate." Mark Massel, *Competition and Monopoly*, Washington, D. C.: The Brookings Institution, 1962, pp. 275-276. Irston Barnes has made a similar point. ". . . courts are on solid ground in examining the characteristics of competition *before* making any determination of the relevant market. . . ." Irston R. Barnes, "The Primacy of Competition and the *Brown Shoe* Decision," 51 *Georgetown Law Review*, 729, 1963.

One of the two critical defining characteristics of any market is the specific product exchanged.[4] The Clayton Act phrase "in any line of commerce" has been interpreted to mean: *for any product.* "The 'area of effective competition' must be determined by reference to a product market (the 'line of commerce'). . . ."[5]

A broad definition of the relevant product, which includes many substitutes, will often lead to the conclusion that competition is intense, and therefore cannot be substantially affected by the proposed merger. A narrow definition, which excludes substitute products, will frequently have the opposite effect.[6]

In the *Philadelphia* case and in one earlier case, the courts considered in a direct fashion only commercial banking in its entirety as a relevant line of commerce.[7] In this way the Court precluded an evaluation of the competition offered by financial institutions other than commercial banks.

Commercial banks are not commonly thought of as economic products, except in the sense that banks can themselves be bought and sold. In merger cases, however, it is not the market represented by buyers and sellers of banks that is scrutinized for potential injury to competition. Section 7 itself restrains competition in this market. Rather, the services offered by banks form the product markets in which the prospective effects of a merger must be judged. The real public policy issue raised by this finding, then, is whether or not *commercial banking in its entirety* represents a *useful* concept for protecting competition threatened by a merger. Before examining this question, we will review briefly the scope of economic knowledge on the subject of industries, markets and products, and outline the current state of the law.

I. *Circling the Market*

In the past thirty years, there has been a fundamental change in the economist's conception of "industries" and "markets." Prior to the 1930's, economists had, for the most part, casually accepted the concept of "industry" as a collection of firms producing exactly the same "product"; they had also accepted the concept of "market" as a group of people engaged in buying and selling the same "product." These definitions seemed fairly descriptive of many of the important industries and markets of the day, such as sugar, tea, coffee, wheat and coal.

Today, there is less certainty as to what constitutes the *same product* and, therefore, what constitutes an "industry" or a "market." The change in view amounts to a greater emphasis on the diversity that has developed as industry has progressed. The products of most industrial firms are somewhat differentiated even from those of their closest competitors; the differentiation may take the form of unique packaging and trademarks, lo-

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[4] The other is the geographic area in which the product is sold. The phrase "any section of the country" has been interpreted as meaning *in any geographic area. Brown Shoe Co.* v. *U. S.*, 370 U. S. 296, 324 (1962).

[5] *Ibid.* See also *U. S.* v. *Bethlehem Steel Corporation*, 168 F. Supp. 576 (1958).

[6] Contrast the decision in *U. S.* v. *E. I. duPont*, 351 U. S. 377 (1956), a Sherman Act case, with Clayton Act decisions, such as *U. S.* v. *E. I. duPont*, 353 U. S. 593 and *Crown Zellerbach Corporation* v. *F.T.C.*, 296 F. 2d 815. However, very narrow product definitions can sometimes lead to the conclusion that the merging companies do not compete with one another and, therefore, cannot injure competition by merging.

[7] *U. S.* v. *Philadelphia National Bank and Girard Trust Corn Exchange Bank*, 201 F. Supp. 384, 363 (1962); *U. S.* v. *Philadelphia National Bank et al., supra*, 356. Board of Governors, *In the Matter of Transamerica Corporation, Federal Reserve Bulletin*, April 1952, pp. 382-383; *Transamerica Corporation* v. *Board of Governors, Federal Reserve Bulletin*, Aug. 1953, p. 840.

cation and reputation, as well as different physical attributes. Even products that are generally grouped together by producers through their trade associations and by consumers are frequently not isolated from the competition of many other products otherwise grouped. They may simply be more, rather than less differentiated.[8]

It is well understood today that the lines which separate the differentiated products of one group of firms from those of another group cannot be drawn exactly. In attempting to circle the appropriate product market for any particular purpose, the issue that arises is not whether the products produced by two different firms are exactly the same; for the chances are that they are not. The issue is, how different are they? Are they close or distant substitutes in fulfilling any particular need or use?[9]

II. *The Line of Commerce at Law*

The courts, as well as the economics profession, have seriously wrestled with the problems of defining "industries" and "markets." However, as late as 1949, a distinguished lawyer, who later became chief of the Antitrust Division of the Justice Department, could state:

> The question of what constitutes a kind of commodity that can be monopolized has not often arisen . . . There has been remarkably little discussion in the decisions of what degree of differentiation must exist in order to set a class of commodities apart in the eyes of the law . . . .[10]

Such a statement could hardly be made today. In recent years, the question has come up repeatedly and has generated a massive debate.[11]

Perhaps the most celebrated case in which the issue of differentiation has been raised was *duPont-Cellophane*.[12] The Court found that duPont had not monopolized the market for cellophane in violation of Section 2 of the Sherman Act because cellophane was not the relevant market. The Court stated:

> We conclude that cellophane's interchangeability with other materials mentioned suffices to make it a part of this flexible packaging material market . . . . The 'market' which one must study to determine when a producer has monopoly power will vary with the part of commerce under consideration. The tests are constant. That market is composed of products that have reasonable interchangeability for the purposes for which

[8] This newer emphasis can be traced through the following works: Alfred Marshall, *Principles of Economics*, 8th ed. London: Macmillan & Co., 1927, pp. 100 n. 1 and 105 n. 1, 324; Edward Chamberlin, *The Theory of Monopolistic Competition*, 8th ed., Cambridge: Harvard University Press, 1962, pp. 81, 102-104, 196-198, and 302-304; Joan Robinson, *The Economics of Imperfect Competition*, London: Macmillan & Co., 1933, pp. 4, 5 and 17; Nicholas Kaldor, "Mrs. Robinson's Economics of Imperfect Competition," *Economica*, August 1934, pp. 335-341; Robert Triffin, *Monopolistic Competition and General Equilibrium Theory*, Cambridge: Harvard University Press, 1940, pp. 78ff.

[9] For a general discussion of statistical techniques used in measuring the degree of substitutability between two products, see Robert Ferber and P. J. Verdoon, *Research Methods in Economics and Business*, New York: The Macmillan Co., 1962, pp. 362-365. For an attempt at measuring the extent of substitution between commercial bank deposits and the liabilities of other financial institutions, see Irwin Friend, "The Effects of Monetary Policies on Nonmonetary Financial Institutions and Capital Markets," unpublished study paper prepared for the Commission on Money and Credit.

[10] Lee Loevinger, *The Law of Free Enterprise*, New York: Funk and Wagnalls Co., 1949, pp. 194-195.

[11] For a summary evaluation of the issues in antitrust cases, see Mark S. Massel, *Competition and Monopoly*, Washington, D. C.: The Brookings Institution, 1962, pp. 236-278 and pp. 443-454.

[12] *U. S.* v. *E. I. duPont*, 351 U. S. 377 (1956).

they are produced—price, use and qualities considered. While the application of the tests remains uncertain, it seems to us that duPont should not be found to monopolize cellophane when that product has the competition and interchangeability with other wrappings that this record shows.[13]

Some economists have argued that the Court was in error in its application of the concept of substitutes in this case. Stocking and Mueller, for example, have said, ". . . cellophane is so differentiated from other flexible wrapping materials that its cross elasticity of demand gives duPont significant and continuing monopoly power."[14]

There has been a recent attempt by a court to confine the precedent represented by the *Cellophane* decision to Sherman Act cases. In *U. S. v. Bethlehem Steel Corporation,* Judge Weinfeld said:

> There is a basic distinction between Section 2 of the Sherman Act and Section 7 of the Clayton Act . . . . Obviously, when the question is power over price, substitute products may be relevant because they can limit that power. The issue under Section 7 of the Clayton Act is not whether a merger may result in a company having power over price or the power to exclude competition. The issue under Section 7 is whether there is a reasonable probability of substantial lessening of competition. There can be a substantial lessening of competition whether or not there are reasonably interchangeable substitutes . . . . This does not, however, mean that interchangeability can be ignored —a high degree of interchangeability may under certain circumstances make it more or less the same product.[15]

Judge Weinfeld's interpretation is not completely satisfactory because the economic distinction he makes is fundamentally an arbitrary one. It implies one definition of competitive structure for Section 2 cases and another for Section 7 cases. As Mark Massel has said:

> Judge Weinfeld's interpretation of Section 7 calls for a market definition which would be quite different from the one that would be used under Section 2 of the Sherman Act. However, the basis for his distinction is not clear. He gave no clue regarding what 'degree of interchangeability' would satisfy a Section 7 market definition. Nor did he explain the difference between the definition of monopoly power in Cellophane 'the power to control prices and exclude competition,' and the standard of lessening of competition which he would apply under Section 7.[16]

In the District Court decision in *Philadelphia,* however, Judge Clary went to some pain to point out that the rule of "reasonable interchangeability" developed in *duPont-Cellophane* was really no different from a rule enunciated in the *duPont-General Motors* case, brought

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[13] *U. S. v. E. I. duPont,* 351 U. S. 377, 400, 404 (1956).

[14] George W. Stocking and Willard F. Mueller, "The Cellophane Case and the new Competition," *American Economic Review,* Volume XLV, 1955, as reprinted in Readings in *Industrial Organization and Public Policy,* Homewood, Illinois: Richard D. Irwin, 1958, p. 149. See also Carl Kaysen and Donald F. Turner, *Antitrust Policy,* Cambridge: Harvard University Press, 1959, pp. 99, 101-102, 134, and 245, for further critical comments on the Cellophane decision.

[15] *Supra,* 593-94 n. 36. See also *Crown Zellerbach Corporation* v. *F.T.C.* 296 Fed. 2d 800, 814 (1961) for an affirmation of Judge Weinfeld's analysis. Some legal distinction may be found in the fact that Section 2 of the Sherman Act refers to "any *part* of the trade or commerce," while Section 7 of the Clayton Act refers to "any *line* of commerce." (Italics added.) It should also be noted that the Supreme Court has made a distinction, in determing the relevant product market in Section 2 cases, between those cases in which the issue is monopolizing and those in which the issue is an attempt to monopolize. See *U. S. v. E. I. duPont,* 351 U. S. 377, 396 n. 23.

[16] Massel, *op. cit.,* pp. 452-453, n. 208. See also L. S. Keyes, "The Bethlehem-Youngstown Case and the Market Share Criterion." *American Economic Review,* September 1961, pp. 645-650.

under the Clayton Act.[17] In the latter case, the product market was separated on the basis of its "peculiar characteristics and uses." He agreed with the Circuit Court in *U. S.* v. *Columbia Pictures Corp.* that these rules were merely different expressions of the same criterion.[18]

Words and phrases such as "peculiar characteristics and uses" and "reasonable interchangeability" hardly have any single universal and timeless meaning. However, they can be interpreted in a consistent fashion and in one that makes a good deal of economic sense. If "reasonable interchangeability" refers to the idea of "substitution," then "peculiar uses" may refer to the idea of "differentiation." In economic jargon, substitution and differentiation are merely two sides of the same coin. The former term focuses on the "nearness" of two products, the latter on "farness." Neither says or implies anything about the actual competitive distance between two products.

The legal phrases could, of course, mean anything the courts wish them to mean; one could be held to require a consideration of more distant substitutes than the other. But neither everyday usage nor economic terminology seem to support this. And, as a result, both phrases merely emphasize the problems involved in circumscribing the market. Neither solves it.

In recent cases, the courts have mentioned a number of considerations that seem to have more or less of a bearing on the choice of product markets in Section 7 cases.

(1) The Supreme Court has noted that "Congress neither adopted nor rejected specifically any particular tests for measuring the relevant markets, either as defined in terms of product or in terms of geographic locus of competition. . . ."[19]

(2) The term "in any line of commerce" need not refer to any specific economic product. It may refer to a cluster of products that represent, in common usage, a well-recognized industry. Thus, in the *Bethlehem* case, the entire iron and steel industry was found to be a relevant line of commerce, along with a large num-

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[17] *U. S.* v. *The Philadelphia National Bank and the Girard Trust Corn Exchange Bank, supra,* 361-363.

[18] *U. S.* v. *Columbia Pictures Corporation,* 189 F. Supp. 153, 183-184 (1960). The Justice Department is now arguing, in *U. S.* v. *Continental Can Co. and Hazel-Atlas Glass Co.,* that interindustry competition is relevant and important in Section 7 cases. In its appeal to the Supreme Court, Justice stated, ". . . Section 7 of the Clayton Act draws no distinction between competition within a single 'industry' and that between different 'industries . . .' Here the government proved . . . that 'substantial and vigorous interindustry competition exists. . . .' This finding makes unavoidable an appraisal of the effects of the merger on this competition. Certainly such an appraisal is not rendered unnecessary by a conclusion that the competition is 'inter-industry.'" *Jurisdictional Statement for the United States,* in Supreme Court, No. 367, October Term, 1963, pp. 9-10. In this case, Justice contends that the Court should consider the adverse impact on competition of a merger between firms in two distinguishable "industries" because the products of each are close substitutes in certain uses. However, if Justice is correct, and such competition is effective, it stands to reason that the same competition would be equally important in the case of a merger between two firms *within either one of the two industries.* If the interindustry competition is important enough to be protected by Section 7, it should be important enough to have a beneficial effect on the behavior of firms in both "industries." To argue, as Justice did before the trial court, that the packaging industry (including the glass and can industries) is a distinct line of commerce, and that the glass container and can industries are also distinct lines of commerce implies that this is not so. If a merger were to take place in, say, the glass container industry, it appears that Justice would want to ignore the competition offered by metal containers.

[19] *Brown Shoe Co.* v. *U. S., supra,* 320-321.

ber of other products.[20] In *Brown Shoe*, as noted in (3) below, the Supreme Court stated that relevant product markets ". . . may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity . . . ." [21]

(3) For purposes of preventing the kinds of competitive injury visualized in Section 7 of the Clayton Act, a product market may be narrower than suggested by the concept of substitution. The Supreme Court stated in *Brown Shoe:*

> The outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it. However, within this broad market, well-defined submarkets may exist which in themselves, constitute product markets for antitrust purposes . . . . The boundaries of such submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors . . . . it is necessary to examine the effects of a merger in each such economically significant submarket to determine if there is a reasonable probability that the merger will substantially lessen competition.[22]

(4) Taking (2) and (3) together, the Court appears to have said that a relevant product market for antitrust purposes may be either a multi-product industry for which the concept of cross-elasticity of demand has no particular relevance, or a single item of production which is differentiated in some minimal way even from close substitutes.

These recent statements could be interpreted as a retreat from the concepts of differentiation and substitutability in defining product markets. Substitutes can be considered; but they need not be. The basis for deciding when they should or should not be considered seems unclear.

III. *The Philadelphia Case*

With this brief review of the economics and current law on the matter of markets, the line of commerce finding in *Philadelphia* and one earlier banking case will now be discussed.

In *Philadelphia*, before the trial court, the Justice Department argued that commercial banking involved ten product markets. These included commercial banking as a whole, as well as commercial and industrial loans, installment lending to individuals, single payment loans to individuals, real estate loans, personal trusts, time deposits of partnerships and corporations, time and savings deposits, demand deposits, and demand deposits of individuals, partnerships and corporations.[23] The defendants disputed the contention that commercial banking in its entirety was a relevant product line. They argued, instead, that commercial banking is divided into two main functions; i.e., the deposit function and the credit func-

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[20] *U. S.* v. *Bethlehem Steel Corporation, supra,* 587-595. Products may be lumped together to form relevant lines of commerce; these lines may, at the same time, be fragmented to stand in co-equal positions as relevant lines. Injury need only be found in one line to proscribe the merger. *U. S.* v. *E. I. duPont,* 353 U. S. 586, 593 (1957).

[21] *Brown Shoe Co.* v. *U. S., supra,* 325. In *A. G. Spalding & Bros., Inc.* v. *F.T.C.,* 301 F. 2d 585 (1962), the Third Circuit Court found the "athletic goods industry" to be a relevent line of commerce. But see the dissent by Judge Kalodner, who objected to this finding on the grounds that "(t)he Commission used too broad a brush and too wide a sweep. . . . Neither the Commission, nor the majority, has demonstrated, for example, how or why golf bags can be related to baseballs as a "relevant line of commerce."

[22] *Brown Shoe* v. *U. S., supra.*

[23] *U. S.* v. *Philadelphia National Bank and Girard Trust Corn Exchange Bank, supra,* 361.

tion; and that in both functions, commercial banks face competition from other institutions.[24]

Judge Clary, however, agreed with the Justice Department. He found commercial banking an appropriate line of commerce and, indeed, the only line of commerce that required consideration.[25] Judge Clary's conclusion, in this respect, was later affirmed by the Supreme Court.[26]

The Federal Reserve Board had come to a similar conclusion about the "line of commerce" in banking a decade earlier in the *Transamerica* case.[27] In that case, the Board refused to consider Transamerica's contention that its bank holdings faced competition from non-bank financial institutions. On appeal, the Third Circuit Court apparently accepted this finding, although it set aside the Board's order on other grounds.[28]

The weight of these opinions creates a formidable barrier in merger cases to the consideration of evidence on competition between commercial banks and other financial institutions. The opinions will be examined in chronological order.

A. Board Finding in *Transamerica*

In its findings, the Board of Governors noted that:

> A principal part of respondent's defense has been devoted to offering or tendering evidence directed to showing the continued existence of effective competition; that competition from commercial banks outside the . . . area, together with competition from nonbanking institutions within and without the . . . area, is such that respondent could not, even if it tried, bring about a substantial lessening of competition. . . .[29]

The Board rejected Transamerica's argument on nonbanking competition and found commercial banking to be the relevant line of commerce. The basis for this finding was that commercial banks perform two unique functions—"these are money-payment and money-creation functions"—and are dominant in "the extension of short-term business credit." As a result, "in these areas there is no substantial competition with commercial banks from any source." [30]

The money-payment function, the Board explained, refers to the use of and demand for commercial bank liabilities (checking or demand deposits) as a means of payment. The money-creation function was said to rest on two principle factors. "First, commercial bank demand deposit liabilities . . . are widely used and accepted as a means of payment or money. Second, commercial banks do not keep a full cash reserve behind each dollar of their demand deposit liabilities, but operate instead on a fractional reserve basis." [31] Commercial banks are unique in that they can create demand deposit liabilities by lending and investing excess reserves. Commercial banks, then, are sole producers of a product (demand deposits) for which there is a unique demand (as a means of payment).

The Board also found that banks supply more than 90 percent of all short-term business credit, and because of

> . . . the commercial banks' intimate knowledge of the affairs of business concerns in the areas in which commercial banks oper-

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[24] *Defendants Brief, U. S.* v. *The Philadelphia National Bank and Girard Trust Corn Exchange Bank*, U. S. District Court for Eastern District of Pennsylvania, Civil Action 29287, October 18, 1961, pp. 31-35. See also, Defendants' Exhibit #41.

[25] *U. S.* v. *Philadelphia National Bank and Girard Trust Corn Exchange Bank, supra*, 363.

[26] *U. S.* v. *Philadelphia National Bank, et al., supra*, 356-357.

[27] Board of Governors, *In the Matter of Transamerica Corporation*, Findings as to the Facts, Conclusions and Orders, *Federal Reserve Bulletin*, April 1952, pp. 382-384.

[28] *Transamerica Corporation* v. *Board of Governors, op. cit.*, pp. 836-841.

[29] Board of Governors, *In the Matter of Transamerica Corporation, op. cit.*, p. 382.

[30] *Ibid.*

[31] *Ibid.*

ate, including that acquired in the course of extending the other services for which such banks are commonly relied upon, commercial banks are able to and do extend and service short-term business credit to the almost total exclusion of other lenders. Financial institutions without the same knowledge of local conditions, and without ready access to such knowledge, afford no practical alternative or substitute for the short-term business credit function of local commercial banks.[32]

While the Board noted that commercial banks did face some competition from other financial institutions in other areas, it found that:

> All of these (other financial institutions), however, depend upon the commercial banking system to carry on their own business, and most of them depend upon it for additional credit for their own operations.[33]

There is one principal and one secondary theme running through these Board findings. The primary one seems to be that commercial banks are suppliers of unique products. If there were only one commercial bank in an isolated area, it would have a monopoly of demand deposits and short-term business credit, no matter how many other financial institutions operated in the same area. The secondary theme, implicit in much that was said, is that the banking business is itself unique in the diversity of its "production" and in the dependence of other financial institutions upon it.

The former theme suggests that commercial banking was used as a line of commerce, because the term "commercial banking" reflects the unique products and services banks supply; commercial banking was a convenient substitute or proxy for these products and services. The latter theme suggests that commercial banking would be a line of commerce regardless of whether commercial banks offer unique products.

B. District Court Finding in the *Philadelphia* Case

In the District Court decision, Judge Clary approached the question of the relevant market by reviewing the "principal characteristics and functions of a commercial bank." [34] He noted that "commercial banks are the only institutions authorized to receive demand deposits";[35] and these account for a large portion of the money supply in the U. S. They "... offer a wider variety of services than any other financial institution." [36] They are highly regulated by banking agencies. They specialize in commercial and industrial loans. "Because of this concentration in demand deposits, these ... loans are necessarily short-term in nature.[37] And they specialize in lending to small and medium size borrowers.[38]

With this general background and in the face of the several individual product and service lines advocated by both the Justice Department and the defendants, Judge Clary stated:

> ... it is not the intention of this Court to subdivide a commercial bank into certain selected services and functions ... It is the conglomeration of all the various services and functions that sets the commercial bank off from other financial institutions. Each item is an integral part of the whole, almost every one of which is dependent upon and would not exist but for the other. *The Court can perceive no useful purpose here in going any further than designating commercial banking a separate and distinct line of commerce within the meaning of the statute.* It is undoubtedly true that some services of a commercial bank overlap, to some degree, with those of certain other institutions.

[32] *Ibid.*

[33] *Ibid.*, pp. 383-384.

[34] *U. S. v. Philadelphia National Bank and Girard Trust Corn Exchange Bank, supra,* 360-361.

[35] *Ibid.*, 360.

[36] *Ibid.*

[37] *Ibid.*

[38] *Ibid.*

Nevertheless, the Court feels quite confident in holding that commercial banking, viewed collectively, has sufficient peculiar characteristics which negate interchangeability.[39] (Italics added.)

Subsequently, Judge Clary found no competitive injury in the commercial banking line of commerce. His failure to find injury raises a question as to why he did not pursue his examination of potential injury to other lines. Section 7 had been interpreted in earlier cases as prohibiting mergers where injury is found in *any* line of commerce.[40] Judge Clary stated, of course, that he could see no useful purpose in "going any further than designating commercial banking a separate and distinct line of commerce." In light of his failure to test other lines, he apparently meant that he found none of the other lines suggested by plaintiff or defendants to be relevant. If he found none of the individual credit and deposit lines to be relevant, he evidently perceived the commercial banking line of commerce as composed of unique multiple-product firms *only*, and not as a representation for the unique products and services commercial banks are frequently alleged to produce.

C. Supreme Court Finding in the *Philadelphia* Case

On appeal to the Supreme Court, the Justice Department argued that ". . . the ruling below was entirely realistic and . . . clearly correct." [41] In supporting this contention, Justice first pointed out that almost all commercial banks perform the same group of functions; i.e., they, and no other institutions, sell the same "set" of services and products.

> All commercial banks, at least all those of substantial size, perform the same functions and render the same services. Since they are competitive with each other in every aspect of their business, the starting point for a determination of the relevant 'product' market necessarily is the entire business in which they are engaged, in short, commercial banking . . . . the record conclusively establishes that no other financial institution could fill the gap caused by the narrowing of the available suppliers of commercial banking service.[42]

Secondly, Justice argued that commercial banks supply unique products—checking deposits and unsecured short-term commercial loans.[43] Finally, Justice pointed out that numerous federal and state statutes apply solely to commercial banks and "represent implicit recognition of the separate and distinct character of their business and functions . . ." [44]

Justice did defer from the implication in the District Court decision that commercial banking is the *only* relevant line of commerce. It maintained that, "in some commercial bank mergers it may be necessary to examine the merger's effect on a particular segment of the business of the merging parties . . ." [45] A merger could injure competition in an economically significant submarket without, presumably, resulting in any undue concentration in commercial banking in the area. But in this case, Justice was content not to press this point.

> But such an examination need not be made where, as here, the facts establish that the merger's effect throughout the general product market, commercial banking, violates the antitrust laws.[46]

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[39] *Ibid.*, 363.

[40] *Brown Shoe Co.* v. *U. S.*, *supra*, 325; *U. S.* v. *E. I. duPont*, *supra*, 594; *Van Camp Co.* v. *American Can Co.*, 278 U. S. 245 (1929).

[41] *Brief for the United States*, *U. S.* v. *The Philadelphia National Bank and Girard Trust Corn Exchange Bank*, in Supreme Court, No. 83 October Term 1962, p. 32.

[42] *Ibid.*, pp. 30-31.

[43] *Ibid.*, p. 31.

[44] *Ibid.*

[45] *Ibid.*, p. 32.

[46] *Ibid.*, p. 32-33.

Thus Justice was willing to accept, but not willing to be limited to, commercial banking as a relevant line of commerce.

The banks again maintained that they faced a good deal of competition from other credit sources and other financial institutions. But by this time, their principal arguments were directed elsewhere.[47]

As mentioned before, the Supreme Court accepted Judge Clary's finding.

> We agree with the District Court that the cluster of products (various kinds of credit) and services (such as checking accounts and trust administration) denoted by the term 'commercial banking' . . . composes a distinct line of commerce.[48]

The Court's explicit reasoning, however, was somewhat different from Judge Clary's and that of the Justice Department. The Court emphasized the uniqueness of the individual products supplied by banks; it did not stress the unique diversity of commercial banking operations, or the fact that only commercial banks, and no other financial institutions offer essentially the same group of products. In finding commercial banking a relevant line of commerce, the Court enumerated the individual deposit and credit categories it thought were distinctive.

> Some commercial banking products or services are so distinctive that they are entirely free of effective competition from products or services of other financial institutions; the checking account is in this category.[49]

Other products, the Court stated, are not so unique but are isolated from the effective competition of other institutions by several factors. Commercial banks were said to enjoy a cost advantage over small loan companies in the personal loan market primarily because the loan companies obtain funds from commercial banks and banks obtain funds (deposits) without having to pay comparable interest. Short-term commercial credit is another market in which banks were said to have a similar advantage. Also, banks were said to enjoy ". . . a settled consumer preference, insulating them, to a marked degree, from competition . . ." for savings deposits.[50] In support of this last point, the Court cited the testimony of a defense witness.

> I have made some inquiries. There are four banks on the corner of Broad and Chestnut. Three of them are commercial banks all offering 3 percent, and one is a mutual savings bank offering 3½. As far as I have been able to discover, there isn't anybody in Philadelphia who will take the trouble to walk across Broad Street to get ½ of 1 percent more interest.[51]

The Court concluded that "commercial banking is a market 'sufficiently inclusive

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[47] *Brief for Appellees, U. S. v. The Philadelphia National Bank and Girard Trust Corn Exchange Bank*, in the Supreme Court, No. 83, October Term 1962. See especially, pp. 8-9. Judge Clary had, after all, held that the Clayton Act did not apply in this case, because the merger was to be by asset acquisition; and that the four-county Philadelphia area was too restricted to be the relevant section of the country. Confirmation by the Supreme Court of either one of these two findings might have been sufficient to carry the day for the banks. It is interesting, however, that Judge Clary maintained that even if the Clayton Act did apply and even if the four-county area were the relevant section of the country, the merger would not create a reasonable probability of injury to competition, and would not be unlawful. His conclusion, in this respect, was very much different from that of the Supreme Court.

[48] *U. S. v. Philadelphia National Bank, et al.*, 374 U. S. 321, 356 (1963).

[49] *Ibid.*

[50] *Ibid.*, 357.

[51] *Ibid.*, 357, n. 34.

to be meaningful in terms of trade realities.'" [52]

Since the Court apparently found commercial banking to be a relevant line of commerce because of the unique and semi-unique products offered, it follows that evidence bearing on the extent of competition offered by other financial institutions would be relevant. Such evidence might suggest that the term "commercial banking" is a more or less imperfect representation of the dimensions of the product markets in which commercial banks operate. If, on the other hand, the Court took the position that diversity and integration (and perhaps public recognition) establish commercial banking as a unique entity, then, in all likelihood, it would not find evidence on substitutes to be persuasive in a case where a merger resulted in substantial concentration of commercial banking assets or deposits.

IV. *An Evaluation of the Finding*

There have been two basic considerations which have resulted in finding commercial banking to be a relevant line of commerce. First, it has been alleged that commercial banks offer unique products; secondly, it has been argued that commercial banks are unique in their diversity. These two considerations will be discussed below.

A. The Differentiated Character of Bank Products

Banks offer a number of services and products which have been said to be practically unique—substantially differentiated from similar products offered by other financial institutions. The question still remains as to whether these allegedly unique products could face effective competion from sources other than commercial banks in particular local markets. If such is the case, the designation of "commercial banking" as a line of commerce could be misleading. The potential error can be seen by examining the principal forms of deposits and credit that the Supreme Court found distinctive in *Philadelphia*.

1. *Checking deposits*

Checking deposits are liabilities of commercial banks payable on demand. They are "produced" by a bank when individuals decide they would rather have a bank deposit than currency, or when they borrow and provide other financial assets as collateral. They are also created when individuals borrow from a bank on their own signature.

Checking deposits have a number of uses. They are clearly a "store of wealth," and more uniquely, they are a "means of payment." In this latter capacity, they represent the largest portion of the money supply in the United States.

Under present law, commercial banks are the only institutions that can offer checking deposits. As a means of payment, such deposits provide great convenience, and existing substitutes are, in many cases, less than perfect. This does not imply that other substitutes are of no importance; currency, money orders and credit cards, for example, serve a similar function in many uses. For some purposes, one or more of these substitutes might be considered superior. But in many uses, checking deposits provide the most effective service.

[52] *Ibid.* The Court cites *Crown Zellerbach Corp.* v. *F.T.C.*, 296 F. 2d 800, 811 (1961). It is interesting that the phrase used by the 9th Circuit Court in that decision, i.e., "sufficiently inclusive to be meaningful in terms of trade realities," was fashioned to justify the F.T.C.'s restriction of the relevant market to "Census coarse paper"—a portion of the paper manufacturing business. *Crown Zellerbach* had argued that all coarse paper should be included in the relevant market. The same phrase is used in the *Philadelphia* decision to justify an expansion of the relevant product market to the "cluster of products . . . denoted by the term 'commercial banking.'"

As a "store of wealth," checking deposits may be held for a number of more or less specific objectives. But no matter what the objective, they must meet rather directly the competition of a wide variety of financial assets. There are few who would hold that commercial banks have a monopoly or could monopolize the "stores of wealth" market.

The demand for checking deposits, then, is clearly a "composite demand." [53] Some people want them for one use, some for another, and still others for a combination of reasons. For purposes of analyzing competitive forces in local market areas, the "means of payment" function of checking deposits is closely related to, and difficult to separate from, the "store of wealth" function.[54] When the cost of holding checking deposits increases, as it has over the last two decades because of increases in interest rates on "near-money" assets, households and businesses have an incentive to store their "idle balances" elsewhere. Moreover, they have an incentive to devise procedures aimed at reducing what formerly had been considered "necessary" transaction balances, and to develop substitutes for meeting transaction needs. In recent years, shifts in "idle balances" from checking deposits to interest yielding assets have been coupled with longer-run changes in attitudes and financial techniques which have tended to reduce the demand for checking deposits.

But no matter what may be the principal use of these balances to the owner, to bankers they are simply demand deposits. If bankers find they are losing demand deposits, or not gaining demand deposits at a rate comparable to the growth of their communities, they will find little comfort in recalling that they have a monopoly of deposits in their "means of payment" function.[55]

The capacity of banks to meet the competition for funds traditionally placed in demand deposits has been severely restrained by the provisions of the Federal Reserve Act which forbid the payment of interest on these deposits. As a consequence, bankers have developed other "attractions," which stand a better chance of competing. They have, over the past 8 or 9 years, revitalized their savings deposits, open time accounts and time certificates of deposit, going so far as to promote the negotiability of the last mentioned.

Thus, bankers often appear to be in competition with themselves for funds. Their efforts to promote time deposits have probably resulted in a shift of funds from demand deposits.[56]

[53] Marshall, *op. cit.*, pp. 100, note 1; 108, note 1; and 387-388.

[54] It should be remembered that this classification of motives was designed to throw light on shifts in the demand schedule for "money"; it was not designed to facilitate market analysis in Section 7 cases. It must be used cautiously, if it is to be used at all.

[55] Marshall points out, "(g)enerally speaking those things have the most elastic demand which are capable of being applied to many different uses." Marshall, *op. cit.*, p. 108. A distinction should be made in antitrust cases between those composite demands which can and those which cannot be broken down by the supplier. If a product has several uses to the same group of people, the supplier will find it extremely difficult if not impossible to separate these uses and take advantage of the use with the least elastic demand. If the product has different uses to different groups, the supplier may find it possible to take advantage of the group with the least elastic demand. To do this he will have to separate this group from the others and charge different prices—in other words, follow a policy of price discrimination.

[56] An increase in the rate on time deposits at a commercial bank can attract funds from checking deposits in the same bank, from checking deposits in other banks, from other financial institutions, and from other marketable assets. It could also increase the financial savings of consumers out of current income. For an analysis of these several possibilities and a suggestion that in early 1962 increased rates on commercial bank time deposits resulted in shifts from demand deposits, see "Growth in Institutional Savings," *Federal Reserve Bulletin*, May 1962, p. 515.

From the individual banker's point of view, no matter what the extent of his isolation from other commercial banks, the most significant competition may be simply for deposits *of any kind*—resources with which earning assets may be purchased. And this competition involves financial institutions other than commercial banks.

What evidence is available, then, suggests that commercial banks do face interinstitutional competition in meeting the demand for checking deposits.[57] The terms, "near monies" and "money substitutes," which have played such an important role in economic thinking in recent years, reflect a point of view quite different from that which considers demand deposits ". . . so distinctive that they are entirely free of effective competion." [58]

Of equal significance is the fact that Congress itself eliminated the most important method of competition among banks for demand deposits; it eliminated all overt price competition. The effectiveness of competitive forces upon the terms on which demand deposits are offered has thereby been narrowly constrained. These forces still may affect such items as service charges on deposits, and overall convenience factors such as "hours opened." But these terms are of less significance than price, and they too may be significantly affected by interinstitutional competition.

2. *Savings deposits*

The competition among commercial banks and other financial institutions for savings deposits has already been discussed peripherally. When the Supreme Court found in *Philadelphia* that there was a settled consumer preference for the savings deposits of commercial banks, it apparently disregarded an abundance of evidence which suggests just the contrary. Theoretical analysis and empirical testing of hypotheses have tended to support the contention that commercial banks face substantial competition from other insti-

[57] The language of financial analysis can be misleading in this matter. For example, see Marvin Rozen, "Competition among Financial Institutions for Demand and Thrift Deposits," *The Journal of Finance*, May 1962, p. 318. Rozen makes the statement that banks do not face competition for deposits as a means of payment. But he immediately qualifies the statement in a footnote. In analyzing the impact of mergers, the qualifications in the footnote are more important than the statement in the text.

[58] *U. S. v. Philadelphia National Bank, et al., supra.*, p. 356. Concerning the influence of the rising cost of holding money on demand deposits, the following works will serve as a point of reference and a review: Warren L. Smith, "On the Effectiveness of Monetary Policy," *American Economic Review*, September 1956, pp. 588-606; Hyman P. Minsky, "Central Banking and Money Market Changes," *Quarterly Journal of Economics*, May 1957, pp. 171-187; Lawrence S. Ritter, "Income Velocity and Anti-Inflationary Monetary Policy," *American Economic Review*, March 1959, pp. 120-129; Richard T. Selden, *The Postwar Rise in the Velocity of Money*, Occasional Paper 78, National Bureau of Economic Research, 1962. In *Transamerica*, the Board made the further point that commercial banks perform the unique function of "money creation." It is fairly well accepted today that emphasis on this unique ability can be misleading. As Gurley and Shaw have pointed out:

> "There are many similarities between the monetary system and nonmonetary intermediates, and the similarities are more important than the differences. Both types of financial institutions create financial claims; and both may engage in multiple creation of their particular liabilities in relation to any one class of asset that they hold. . . . The difference between the monetary system and the nonmonetary intermediaries in this respect, then, is not that one creates and the other does not, but rather that each creates its own unique form of debt." (*Money in a Theory of Finance*, the Brookings Institution, 1960, pp. 198-199, and 202.)

tutions in the savings market.[59] A recent extensive study on the monetary and financial system of the United States found that substantial competition existed among various types of financial institutions—commercial banks, savings banks, savings and loan associations, credit unions, life insurance companies and private pension funds.

These institutions hold more than three-quarters of the assets of all private financial institutions and are the principal depositories of the country's financial savings. Since they all offer fixed dollar obligations, they are active competitors for funds of savers.[60]

While there is a good deal of evidence that such competition does actually exist, the question still remains as to whether the nature of the competition is such that it should be considered in Section 7 cases. The Supreme Court has argued that consumers have a settled preference for the savings deposits offered by commercial banks. It supports this contention by citing testimony to the effect that other institutions can pay higher rates and still not attract savings from commercial banks.[61] The fundamental argument behind this approach is that one differentiated product in a group of similar products will not face effective competition from these similar products, if its demand schedule is significantly higher, or if its cost schedule is significantly lower than the demand and cost schedules of the other products.[62] If the demand schedule for savings deposits at commercial banks were higher than the demand schedules for other types of savings deposits, commercial banks could earn excessive profits on savings deposits despite the existence of these other substitutes. The same would hold true if the costs of providing savings deposits at commercial banks were lower.

In the *Philadelphia* case, the Court noted the price (interest rate) differences between savings deposits at commercial banks and similar assets at other institutions, and concluded that these similar assets need not be considered as close substitutes. The Court evidently felt that the demand schedule facing commercial banks actually was higher; that shares in savings and loan associations, for example, were relatively inferior substitutes; that any tendency toward a monopoly of commercial bank savings deposits would leave savers only relatively undesirable options; and that commercial banks, if few in number, would enjoy a substantial amount of market power in the savings market.[63]

[59] Direct testing on the extent of inter-industry competition has proved difficult. But what studies are available suggest that competition does exist. A recent study by the Markets Unit Section of the Board of Governors, still in preliminary form, indicates that the rates paid on time deposits by commercial banks in Minnesota towns are significantly influenced by the presence of savings and loan associations; a study of changes in relative savings acquisitions of savings and loans, mutual savings and commercial banks in the Philadelphia area also tends to confirm the existence of close competition. See Bernard Shull, "Struggle For Savings—The Philadelphia Story," *Business Review*, Federal Reserve Bank of Philadelphia, April 1963; also see Friend, *op. cit.*, p. 72.

[60] *Money and Credit*, The Report of the Commission on Money and Credit, *op. cit.*, pp. 160-161.

[61] *U. S. v. The Philadelphia National Bank, et al., supra*, 357.

[62] That demand and cost schedules do not differ, is Chamberlin's "uniformity assumption." *The Theory of Monopolistic Competition, op. cit.*, pp. 82-83.

[63] The need to consider price and cost differences in determining which products should be included in the market was vigorously pointed out by George Stocking and Willard Mueller in their criticism of the *du-Pont-Cellophane* decision. They argued that the rival products included by the Court were not close substitutes. They found that duPont could lower the price of cellophane relative to the prices of the so-called substitutes and broaden the cellophane market at the expense of these substitutes. They also presented evidence to support their contention that duPont earned persistent profits in excess of what might be considered reasonable. "The *Cellophane* Case and the New Competition," *American Economic Review*, March 1955, pp. 44-63, especially.

Whether the lower rates at commercial banks reflect higher demand or higher costs or both is something that would require further investigation. Both higher demand and higher costs have been contended. The experience of the last two decades, however, belies the contention that commercial banks are insulated from the effect of interest rate changes at other institutions. Interest rates on savings deposits and shares in financial institutions other than commercial banks have risen rapidly in the postwar period. They increased in advance of and more rapidly than rates at commercial banks. These increases were possible because of the cost structures of these institutions, their portfolio policies and the absence of restrictive regulations; and they transformed the savings and loan business, for example, from an $8 billion industry in 1945 to a $100 billion industry in mid-1963.

In recent years, the Federal Reserve has revised Regulation Q to permit commercial banks to pay higher rates on time and savings deposits. One expressed purpose has been to permit commercial banks to compete more effectively with other financial institutions. Many commercial banks have raised their rates, and have tended to catch up with the other institutions both in interest rate levels and deposit acquisitions.

But rates at these other institutions have not remained stable in the face of rising commercial bank rates. In Philadelphia, itself, mutual savings banks increased their rates from 3½ percent to 4 percent in March of 1962, at about the time commercial bank rates rose from 3 to 3½ percent.

The crucial test, however, is profits. Have commercial bank earnings on time deposits been excessive? A number of investigations on the adequacy of bank earnings on time deposits provide more support for the contention that earnings have been deficient.[64]

It must be concluded, then, that the events of the postwar period do not support the finding that commercial banks are insulated "to a marked degree" in savings markets from the competition of other financial institutions.

3. *Total deposits*

As suggested above, the separation of deposit markets into demand and savings may not really serve the purpose of analysis under Section 7 of the Clayton Act. The competitive forces that have arisen in one corner of the deposit market have spread out and encompassed the entire market. These forces have also led to institutional changes in the nature of the "products" offered.

In trying to satisfy the demands of the public and to meet the competition of other institutions, commercial banks have raised rates on time and savings deposits and have tried to minimize the difference between them and demand deposits. The Commission of Money and Credit noted this development in its *Report*.

Regulation Q of the Federal Reserve Board defines demand deposits precisely. The definitions for time and savings deposits are less specific, *and both are tending to become*

[64] An extensive literature on the impact of this interinstitution competition on commercial bank earnings has accumulated. See, for example: David and Charlotte Alhadeff, "The Struggle for Commercial Bank Savings," *Quarterly Journal of Economics*, February 1958, pp. 1-22; Joseph Aschheim, "Commercial Banks and Financial Intermediaries: Fallacies and Policy Implications," *Journal of Political Economy*, February 1959, pp. 59-71; Deane Carson, "Bank Earnings and the Competition for Savings Deposits," *Journal of Political Economy*, December 1959, pp. 508-588; "Profits on Commercial Bank Time Deposits," *Monthly Review*, Federal Reserve Bank of Kansas City, September 1961, pp. 3-9; and "Looking Behind Bank Earnings," *Business Review*, Federal Reserve Bank of Boston, December 1961.

more and more like demand deposits. (Italics added.) [65]

Other thrift institutions have also tried to minimize the differences between their liabilities and demand deposits. They have consistently "paid on demand"; and they have emphasized the safety of Government insurance as well as liquidity.

Total deposits(IPC) might be considered a relevant product line. But in any local area, the competition of substitutes offered by other financial institutions could be more or less important.

4. *Short-term business credit*

As the Supreme Court noted in the *Philadelphia* case, commercial banks have traditionally specialized in the extension of short-term business loans. This specialization was originally based upon the need for liquid assets to offset liquid liabilities, as well as the profitability of this sort of credit. Even today, commercial banks do meet a sizeable proportion of the needs of business for short-term funds.

But banks have diversified considerably in recent years, while other institutions and techniques have arisen in the short-term business credit area.[66] Commercial finance companies, insurance companies, and the open market have offered credit to supplement that offered by commercial banks, business firms (trade credit), and factors.

The question at issue, however, is whether these alternative sources represent effective substitutes for commercial bank loans, in view of the objectives of Section 7 of the Clayton Act. The Court found in *Philadelphia* that such is not the case. It argued that the institutions representing alternative sources of credit depend upon banks for a large portion of their funds, and that banks would not lend them funds if they competed for the same customers. The Court cited testimony to this effect, as well as to the effect that commercial banks have a competitive advantage over these other institutions, because they can obtain the bulk of their capital without having to pay interest. It also noted that only large companies can meet their financing needs from retained earnings or by selling securities or paper in the open market.[67]

At one or two points, the Court's reasoning leaves something to be desired. No matter what the extent of their overall dependence on commercial banks for funds, large non-bank financial institutions are not necessarily dependent on commercial banks *in any particular local area.* These institutions can compete for the same local customers without concern about retaliation from local banks. Secondly, to the extent that small firms have access to trade credit supplied by large firms, and credit supplied by finance companies, they do have indirect access to the open market. This indirect access might provide effective competition for local banks in some areas.

But more importantly, existing conditions are actually quite different from those indicated by the Court. Large finance companies and businesses are no longer dependent upon commercial banks for the bulk of their funds. Moreover, commercial banks do not necessarily have a cost advantage over other institutions in all types of small business loans.

In 1920, banks were virtually the only holders of commercial paper. Today, they hold no more than 20 to 25 percent of outstanding paper. Their place has

[65] *Report on Money and Credit, op. cit.*, p. 168.

[66] For a review of the various sources of business credit, see V. L. Andrews, S. Friedland and E. Shapiro, "Who Finances Small Business?" *Financing Small Business*, Part I, Volume I, #2, The Federal Reserve System, 1958.

[67] *U. S. v. The Philadelphia National Bank, et al., supra*, 356-357.

been usurped by nonfinancial corporations and other lenders.[68]

Rates charged by finance companies, moreover, are geared to the kinds of business borrowers with whom they deal. Their higher rates may reflect higher risk categories, rather than a higher cost of funds. In an extensive study on small business lending, it was found that "particular or specialized financial institutions can acquire funds in the market at low rates because of their superior credit rating, and lend them to smaller firms at a rate lower than the borrowing firm would have to pay, if it approached the capital market directly. . . ." [69]

It could be argued that these other institutions are operating in a separate market—the higher-risk small loan market. But, in actuality, they have been chewing away at a larger loan market which formerly had been dominated by commercial banks. Richard Selden has said:

> The serious implication of these developments from the standpoint of the banks is not that they have lost commercial paper as a relatively high-yield earning asset, but rather that they have increasingly lost customer loans to finance companies and others who have been turning to the open market for their short-term funds.[70]

In 1958, Andrews, Friedland and Shapiro found ". . . evidence of the development of new lending techniques by existing lenders as well as the creation of new types of financial institutions which provide funds and financial services adapted to the needs of would-be small business borrowers. . . ." [71] In 1963, Selden found that "though open market credit is still small in comparison with short-term business loans of banks, the rapid growth of the commercial paper and acceptance markets in the last decade or so has made bankers acutely aware of the competitive threat offered by the open market." [72]

Given the trend in the short-term business loan market, it hardly seems safe to classify it, *a priori*, in any one particular local area, as a market in which commercial banks "have little effective competition." [73]

5. *Personal loans*

Much of what has already been said in regard to business loans applies also to personal loans. Some of the same types of institutions that have provided competition to banks in business lending also provide competition in the consumer lending field. And there are additional institutions operating in this market, such as credit unions, which have enjoyed considerable growth in recent years. Banks, at one time, were the dominant if not the only important source of short-term business credit, while non-bank institutions at one time, were the dominant if not the only source of consumer credit. The more recent trends in these two credit areas have been just the opposite. In business lending, other institutions have developed as a competitive threat to commercial banks; in consumer lending, commercial

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[68] Richard T. Selden, "Commercial Paper, Finance Companies and the Banks," *Banking and Monetary Studies*, Deane Carson (ed.), Homewood, Illinois: Richard D. Irwin, Inc., 1963, p. 340. The paper cited is based on a more extensive study by Selden entitled *Trends and Cycles in the Commercial Paper Market*, Occasional Paper 86, National Bureau of Economic Research, 1963.

[69] Andrews, Friedland and Shapiro, *op. cit.*, p. 44.

[70] Selden, *op. cit.*, p. 340.

[71] Andrews, Friedland and Shapiro, *op. cit.*, p. 43.

[72] Selden, *op. cit.*, p. 333.

[73] *U. S. v. The Philadelphia National Bank, et al., supra*, p. 357.

banks have developed as a competitive threat to other institutions.[74]

The important point in assessing the Court's statements on this subject is, once again, the questionable generalization that commercial banks face no effective competition in all relevant sections of the country.

6. *The uniqueness of bank products*

There are several fundamental difficulties with the reasoning behind the line of commerce findings which have emphasized the uniqueness of the services banks offer. These findings look to a certain kind of commercial bank and banking market that may no longer be representative of the actual situation in many large metropolitan areas of the United States. In the United States, the commercial bank of the 19th century did offer one or more unique services. However, it is the commercial bank *circa* 1963 that must be considered.

Moreover, these findings generally ignore the dynamic qualities of financial markets. Financial innovation has generally tended to bring all financial and even non-financial institutions economically closer to one another in credit markets. Perhaps the principal barriers to this process have been federal and state government regulations which restrict branching of financial institutions, or limit portfolio acquisitions, for example. Indeed, there are always attempts on the part of private firms and groups to differentiate themselves from others and to maintain time-honored distinctions. But in financial markets, these attempts have been a relatively superficial counter-theme to the more basic movement.

The findings also tend to apply national characteristics to local financial markets. Thus, to say that the banking system as a whole creates a means of payment really has little significance in evaluating competition in local deposit markets. To say that finance companies borrow from banks also tells us little about competition between finance companies and banks in particular local markets.

Finally, the findings fail to differentiate among local markets. It seems reasonable to believe that commercial banks face substantially more effective competition from other institutions in some local markets than in others. But the current "line of commerce" finding precludes consideration of this fact. It holds the differences among markets to be unimportant.

B. The Integrated Character of Commercial Banking

Judge Clary's decision for the District Court in *Philadelphia* emphasized the integrated character of commercial banking; and on this basis, commercial banking was selected as the relevant line of commerce.

The ability to diversify does provide banks with a number of advantages. It reduces risk and therefore costs of operation; and it gives commercial banks the opportunity to take advantage of special situations in a wide variety of fields. If accompanied by monopoly power in some markets, it can result in a form of price discrimination and credit rationing.[75]

Thus one can agree with Judge Clary that each commercial bank operation is

[74] For a review of the development of the consumer credit market, see Tynan Smith and Katharyne P. Reil, "Types of Instalment Credit and Credit Institutions," *Consumer Instalment Credit*, Part I, Volume I, Board of Governors of the Federal Reserve System, 1957, pp. 22-42. For development of the personal loan market, *per se*, see especially p. 32. Theodore A. Anderson also provides an informative study of "Market Practices in the Consumer Lending Industry," In *Consumer Instalment Credit*, Part II Volume I, Board of Governors of the Federal Reserve System, 1957, pp. 424-440.

[75] See Bernard Shull, "Commercial Banks as Multiple-Product, Price-Discriminating Firms," *Banking and Monetary Studies*, Deane Carson (ed.) *op. cit., pp.* 351-368.

"an integral part of the whole, almost every one of which is dependent upon and would not exist but for the other;" [76] but one can question whether this observation provides a separate basis for selecting commercial banking as a line of commerce. The important *economic* products would still appear to be the individual lines, not their conglomeration.[77] Judge Clary's finding, then, is somewhat suspect on economic grounds; this is particularly true because he did not specify the economic abuses that a conglomerate merger of commercial banks in Philadelphia threatened.

V. *Should Commercial Banking Be a Line of Commerce?*

The purpose of Section 7 of the Clayton Act, as frequently stated, is to prevent the development of monopoly in its incipiency. The principal problem of implementation involves *forecasting* the impact of a merger on competition. The procedure of making findings on subsidiary topics, such as "line of commerce," can be looked at as a technique designed to improve the reliability of the ultimate forecast. To serve this purpose, subsidiary findings must be as realistic as possible.

The Board of Governors in *Transamerica* and the District and Supreme Courts in *Philadelphia* have held that commercial banking is "a," if not "the," relevant line of commerce in bank merger cases. The principal implication of this finding is that competition offered by other financial institutions in the several credit and deposit markets in which commercial banks operate is irrelevant in arriving at a decision on the prospective injury threatened by a merger.

The major economic issue in evaluating the selection of "commercial banking" as a line of commerce is whether or not commercial banks offer unique products. If commercial banks currently offer one or more products for which there is no effective competition from other sources, commercial banking would then be a suitable line of commerce.

The products which the Supreme Court assumed were relatively unique in its *Philadelphia* decision are, in reality, somewhat less so. Only careful study can serve to determine whether banks in a particular local area face effective competition from other financial institutions. To select "commercial banking" as an invariant line of commerce in bank merger cases implies that, as a general rule, a careful study of local market conditions is not necessary.

In *Philadelphia,* the court justified its adoption of general rules, particularly its concentration ratio rule for probable injury, by citing the virtues of "certainty" and "simplicity."

> . . . Unless businessmen can assess the legal consequences of a merger with some confidence, sound business planning is retarded . . . . So also, we must be alert to the danger of subverting congressional intent by permitting a too-broad economic investigation . . . . and so in any case in which it is possible, without doing violence to the congressional objective embodied in Section 7, to simplify the test of illegality, the courts ought to do so in the interest of sound and practical judicial administration . . . . This is such a case.[78]

The Court achieved one objective, then, in simplifying the test of illegality. But as Kaysen and Turner have noted, ". . . the closer a test approaches to certainty, where economic regulation is involved, the less certain it is that the test

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[76] *U. S. v. Philadelphia National Bank and Girard Trust Corn Exchange Bank, supra.* 363.

[77] See Kaysen and Turner, *op. cit.*, pp. 134-135.

[78] *U. S. v. The Philadelphia National Bank, et al., supra,* p. 361. This streamlined approach has recently been applied by the F.T.C., In the Matter of *Brillo Manufacturing Company, Inc.*, Docket No. 6557, July 31, 1963.

is either reasonable or unlikely to cause substantial harm."[79] In banking, the harm that may be caused involves a public interest beyond that at issue in most industries. Many states have severely restricted branching and new entry in banking, and have thereby obstructed the adjustment of banking to a fast changing and growing economy. Far more often than in other industries, bank mergers seem likely to effect new entry into one or more markets and to provide a competitive element where it has been lacking.

In *Philadelphia,* a somewhat arbitrary test of probable injury was superimposed upon a somewhat arbitrary determination of the relevant product and geographic markets.[80] The procedure followed thus casts doubt on the reliability of the Court's prediction of probable injury to competition.

At the close of its decision, the Court said:

> At the price of some repetition, we note that if the businessman is denied credit because his banking alternatives have been eliminated by mergers, the whole edifice of the entrepreneurial system is threatened; if the costs of banking services and credit are allowed to become excessive by the absence of competitive pressures, virtually all costs in our credit economy will be affected. . . .[81]

These are undoubtedly important concerns. They raise important questions. Is it likely that a merger will result in small businesses in a *particular locality* being excluded from credit? Is it likely that the costs of credit will also rise *in that locality?* But these are questions the Court could not really answer in *Philadelphia,* partly because it confined itself to an unrealistically rigid "line of commerce." As a result, the decision became largely an exercise in logic, unencumbered by the problems of cross elasticity and substitution. The danger now is that this finding will inhibit the kind of investigation required to answer such questions in future cases.

[79] Kaysen and Turner, *op. cit.*, p. 99.

[80] Recognizing diversity in the geographic extent of commercial banking markets, the Court admittedly compromised in selecting the four-county Philadelphia area. *U. S. v. Philadelphia National Bank, et al., supra,* 356-361.

[81] *U. S. v. The Philadelphia National Bank, et al., supra,* p. 372.

► H. PETER GRAY

Bank Regulation, Bank Profitability, and Federal Reserve Membership

The purpose of this paper is to analyze the effects on bank profitability, of differences between state and Federal Reserve regulations, in order to appraise their influence on membership in the Federal Reserve System. A strictly quantitative approach is not possible, but some notion of the significance of any profit-inhibiting requirements imposed on member banks may be obtained from a general analysis based on aggregate data.

Section I will summarize the differential impact of state and Federal Reserve System regulations on bank profitability; Section II will assess the effects of these differences on membership of state banks in the System; and Section III will examine the effect of the secular decline in System reserve requirements on the ratios of cash holdings to assets for member and non-member State banks.

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I. *Bank Regulation and Bank Profitability*

There are four principal ways in which State legislation can affect the ratio of net current earnings to total capital accounts: (1) by influencing the yield on loans and investments; (2) by permitting or prohibiting nonpar clearance of checks; (3) by influencing the ratio of capital to total assets; and (4) by influencing the ratio of earning assets to total assets.

(1) Gross earnings from loans and investments will be affected by Federal and State regulations only where such regulations influence the composition of the bank's earning-asset portfolio. The state

regulations which most significantly affect the composition of earning-asset portfolios are those governing the level and composition of non-cash reserves required to be held against deposit liabilities.

If the composition of non-member bank earning-asset portfolios is to be affected by State regulation, it is the requirement concerning securities reserves which must exert the constraint. No state applies a mandatory securities reserve requirement to commercial banks under its jurisdiction. However, sixteen states permit all or some portion of the total reserve requirement to be kept in the form of U.S. Government obligations. Of these states, three, Maryland, Pennsylvania and Vermont permit local state obligations to be held in lieu of U.S. Government securities in whole or in part.[1] The largest required reserve which may be held in the form of government securities is 20 percent (Florida). Since Florida's reserve requirement of 20 percent may be satisfied by holdings of vault cash, or balances with banks, as well as by government securities,[2] however, there is little likelihood that it would bias the composition of the earning-asset portfolio and thus influence the yield on earning assets.

Vermont has a reserve requirement which may appear more likely to affect the earning-asset portfolios of banks. Of a total reserve requirement against demand deposits of 30 percent, Vermont law requires that 12 percent must be held in cash assets, and the remaining 18 percent may be held in government securities. However, even this more restrictive state requirement is likely to have only a negligible effect on the composition of earning-asset portfolios, since it is unlikely that banks will want to reduce their security holdings to less than 18 percent of their total deposit liabilities. The other state regulations are less significant in this respect, and state securities reserve requirements may therefore be disregarded as an influence upon the rate of return on earning assets obtained by commercial banks.

(2) Charging exchange on checks presented for clearance represents a significant source of income for some banks.

From reports submitted to the Board of Governors by the Federal Reserve banks it appears that in one Federal Reserve district a group of about 47 non-member nonpar banks recently reported receipts from exchange charges of from $125 to $500 per month. One or two nonpar banks reported income from this source equal to 10 percent of capital.[3]

While it is possible that equivalent revenue could be obtained through charges made on the depositor rather than on the person or bank presenting the check for payment, many nonpar banks would undoubtedly be unwilling to give up this source of income in order to join the Federal Reserve System.[4]

No state prohibts banks from charging exchange on the payment of checks.[5] In seven states such charges are authorized by state law, and in six of these states nonpar banks comprise over one-half of all non-member banks. The exception is Florida, where the number of nonpar

[1] "Compilation of Federal and State Laws Relating to Reserves Against Deposits in Banking Institutions," prepared by the Legal Division of the Board of Governors of the Federal Reserve System, February 1, 1962.

[2] There is no restriction on the securities held as to maturity. No state excludes any maturity, although two states require that securities be valued at the market rate (Massachusetts and Nebraska), and one that securities be valued at par (Connecticut). *Ibid.*

[3] George B. Vest, "The Par Collection System of the Federal Reserve Banks," *Federal Reserve Bulletin*, XXVI, February 1940, p. 95.

[4] *Ibid.*, p. 95.

[5] B. Magruder Wingfield, "Deterrents to Membership in the Reserve System," *Banking Studies*, (Washington, 1941), p. 276.

banks declined from 87 in 1939 to 40 in 1962.[6]

The attitudes of state Legislatures toward exchange charges is probably only of historical significance. Currently, the more influential factors determining bank policy on par clearance are the type of community in which the nonpar bank is situated, the distance from the nearest metropolis and nearest par bank, and the size of the bank. The extent of branching and merging in a state also may affect the survival of nonpar banks. A case study of nonpar banks in North Carolina has shown that nonpar banks are largely small banks in small towns in which there is no bank which clears at par. Eighty-seven percent of nonpar banking offices at the end of 1956 were located in towns in which no par-remitting office was located.[7]

(3) Capital considerations can operate as a bar to membership only where the minimum capital requirements or the required capital-assets ratio are more severe than those imposed by the state. There is now no specific minimum capital requirement for membership.[8] However, there does exist a minimum capital requirement for the membership of branch banks.[9] The membership of smaller branch banks may thus be discouraged. The influence of required capital-asset ratios on membership is more difficult to determine, since it depends upon the policies of the examining agencies. The probability, however, is that this factor will not be significant, since all but a small number of non-member banks are insured, and there is no *a priori* reason for assuming that the policies of the two Federal agencies will differ in this respect.

(4) The main area of influence of state legislation on the rate of return to capital is undoubtedly the "load factor." The "load factor" is defined in this study as the ratio of earning assets to total assets, or as unity minus the ratio of cash holdings to total assets. This influence varies from state to state as a result of the different levels of reserves required by the different states, and the alternative forms in which these reserves may be held. In all 50 states, member banks are considered to satisfy state requirements by meeting the requirements of the Federal Reserve System. However, to the extent that state regulation is more favorable, a bank can improve its position in this respect by staying outside or shifting from the System.

While the level of required reserves is an extremely important factor in the determination of a bank's load factor, it is not the only determinant. The operating requirements of vault cash, the level of

[6] *Banking Studies, op. cit.*, p. 446, and *Forty-Ninth Annual Report of Governors of the Federal Reserve System, 1962*, (Washington, 1963), p. 167.

[7] Clifton H. Kreps, Jr., "Characteristics of Nonpar Banks: A Case Study," *Southern Economic Journal*, XXVI, July 1959, pp. 44-49, especially pp. 47 & 48, and footnotes 13 and 14.

[8] The specific minimum capital requirement for membership was eliminated by the 82nd Congress in July 1952. See *Federal Reserve Bulletin*, July 1952, p. 773. The current requirement is simply that the capital structure meets with the approval of both the F.R.S. and the F.D.I.C. Prior to this statutory change, capital requirements for membership were the same as those for a national charter and, except for a minor change instituted by the McFadden-Pepper Bank Act, 1927, had remained unchanged since the institution of the Federal Reserve System. See Charles S. Tippets, *State Banks and the Federal Reserve System*, New York: D. Van Nostrand Company, 1929, pp. 357-358 and 375-376. It may be noted here that the capital requirements for a national charter have remained unchanged since the National Banking Act of 1863, except for the reduction for a bank located in the suburbs of a city of over 50,000 inhabitants.

[9] Currently, minimum capital requirements for the membership of branch banks are that the bank should have capital and surplus sufficient for the establishment of a national bank in each of the various places where its offices are located. See *Federal Reserve Bulletin*, July 1952, p. 773.

Table 1

State Reserve Requirements for Commercial Banks, January 1, 1962 *

State	Required Reserves (percent of deposit specified)		Composition of Reserves					
			Demand Deposits			Time Deposits		
	Demand	Time	Vault Cash	Balances with Banks or vault cash	Securities,† Balances or vault cash	Vault Cash	Balances with Banks or vault cash	Securities,† Balances or vault cash
Alabama	15	4	—	15	—	—	4	—
Alaska	20	8	—	20	—	—	8	—
Arizona	10	5	—	10	—	—	5	—
Arkansas ‡§	15	15	—	15	—	—	15	—
California ‡	12	5	6	6	—	1	—	4
Colorado	15	15	—	—	15	—	—	15
Connecticut	12	0	2	8	2	—	—	—
Delaware	11	5	—	11	—	—	5	—
D. of Columbia ¶	16.5	5	—	16.5	—	—	5	—
Florida	20	20	—	—	20	—	—	20
Georgia	15	5	—	15	—	—	—	5
Hawaii	12	5	—	12	—	—	5	—
Idaho	15	15	—	10	5	—	10	5
Illinois	††	—	—	—	—	—	—	—
Indiana	12.5	3	—	12.5	—	—	3	—
Iowa ‡	7	3	1.05	5.95	—	.45	2.55	—
Kansas ‡	12.5	5	—	12.5	—	—	5	—
Kentucky ‡	7	3	2.33	4.67	—	1	2	—
Louisiana	20	0	—	20	—	—	—	—
Maine	11	5	—	11	—	—	5	—
Maryland	15	5	—	15	—	—	—	5
Massachusetts ‡	15	0	3	6	6	—	—	—
Michigan	12	12	—	12	—	—	—	12
Minnesota ‡	12	5	—	12	—	—	5	—
Mississippi ‡	15	7	—	15	—	—	7	—
Missouri ‡	15	3	—	15	—	3	—	—
Montana ‡	10	10	—	10	—	—	10	—
Nebraska ‡	15	5	—	12	3	—	4	1
Nevada ‡	12	6	—	12	—	—	6	—
New Hampshire	15	15	—	15	—	—	—	15
New Jersey	12	5	—	12	—	—	5	—
New Mexico	12	12	—	12	—	—	12	—

uncollected cash items, and the volume of correspondent balances all affect the volume of cash holdings. Table 1 shows the reserve requirements for "country" commercial banks by state, and Table 2, the reserve requirements for "noncountry" banks by state, as of January 1, 1962. At that time, Federal Reserve System requirements for country banks were 12 and 5 percent against demand and time deposits respectively—with vault cash counting toward reserves.[10] Differences between System and state reserve requirements are best analyzed on the basis of country banks alone, but Table 2 data is relevant in the case of a bank being classified by a state as a "noncountry"

[10] In late 1962 reserve requirements against time deposits were reduced from 5 to 4 percent.

Table 1—Continued

State Reserve Requirements for Commercial Banks, January 1, 1962 *

State	Required Reserves (percent of deposit specified)		Composition of Reserves					
			Demand Deposits			Time Deposits		
	Demand	Time	Vault Cash	Balances with Banks or vault cash	Securities,† Balances or vault cash	Vault Cash	Balances with Banks or vault cash	Securities,† Balances or vault cash
New York ‡	11	5	—	11	—	—	5	—
North Carolina	15	5	—	15	—	—	5	—
North Dakota	10	5	—	10	—	—	5	—
Ohio	15	10	—	15	—	—	4	6
Oklahoma ‡	15	5	—	15	—	—	5	—
Oregon	15	5	—	15	—	—	5	—
Pennsylvania	14	6	—	8.4	5.6	—	3.6	2.4
Rhode Island	15	0	6	9	—	—	—	—
South Carolina	7	3	—	7	—	—	3	—
South Dakota	17.5	17.5	—	7	10.5	—	7	10.5
Tennessee	10	3	—	10	—	—	3	—
Texas **	15	5	—	15	—	—	5	—
Utah ‡	15	5	1.88	13.12	—	1.25	3.75	—
Vermont	30	8	—	12	18	—	3.2	4.8
Virginia	10	3	—	10	—	—	3	—
Washington	15	6	—	15	—	—	6	—
West Virginia	10	5	2	8	—	1	4	—
Wisconsin ‡	12	12	—	8	4	—	8	4
Wyoming	20	10	—	20	—	—	10	—

Source: "Compilation of Federal & State Laws relating to Reserve Requirements," **loc. cit.**

* The requirements listed are applicable to "country banks" in all States except for minor deviations noted in the footnotes. States marked with an asterisk (‡) have separate provisions for "noncountry banks." See Table 2.

† Maryland, Pennsylvania and Vermont allow the inclusion of State and municipal securities as well as U. S. Government obligations.

§ Banks with capital of less than $25,000 are required to keep reserve requirements of 50 percent of which one quarter may be invested in securities.

¶ Federal Reserve System reserve requirements for reserve cities apply. Time deposits now require reserves of only 4 percent.

** Banks with capital of less than $25,000 must maintain a reserve against demand deposits of 20 percent.

†† No statutory reserve requirements.

bank and by the Federal Reserve System as a "country" bank. This possibility is most likely to occur in California and Missouri, where state reserve requirements depend upon the population of the city in which the principal office is located, and where relatively small cities are classified as "noncountry" areas.

Virtually all smaller banks need the services of correspondent banks. In order to obtain these services without an explicit charge, and in order to facilitate check clearance, smaller banks maintain demand balances with banks in neighboring financial centers. All states allow these balances to count toward the reserves required by state law. Therefore, these required reserves have an adverse effect upon the load factor only if they exceed the correspondent balances which

Table 2

State Reserve Requirements for "Noncountry Banks"

State	Required Reserves (percent of deposit specified)		Composition of Reserves					
			Demand Deposits			Time Deposits		
	Demand	Time	Vault Cash	Balances with Banks or vault cash	Securities, Balances or vault cash	Vault Cash	Balances with Banks or vault cash	Securities Balances or vault cash
Arkansas	20	20	8	12	—	8	12	—
California *								
(Large cities)	18	5	9	9	—	1	—	4
(Medium cities)	15	5	7.5	7.5	—	1	—	4
Iowa	10	3	1.5	8.5	—	.45	2.55	—
Kansas †	20	5	—	20	—	—	5	—
Kentucky	10	3	3.33	6.67	—	1	2	—
Massachusetts	20	—	4	8	8	—	—	—
Minnesota	15	5	—	15	—	—	5	—
Mississippi	25	10	—	25	—	—	10	—
Missouri ‡								
(Large cities)	18	3	7	11	—	3	—	—
(Medium cities)	15	3	6	9	—	3	—	—
Montana	15	15	—	15	—	—	15	—
Nebraska	20	5	—	16	4	—	4	1
New York	16.5	5	—	16.5	—	—	5	—
Oklahoma	18	5	—	18	—	—	5	—
Utah	20	5	2.5	17.5	—	1.25	3.75	—
Wisconsin	20	20	—	13.33	6.67	—	13.33	6.67

Source: See Table 1.

* Large cities are defined as having a population in excess of 100,000. The requirements shown in the Table apply only to Reserve depositories. For banks that are not Reserve depositories but which are located in places with populations greater than 50,000, the requirements are the same as are shown in the Table except that the vault cash requirement is only 6 percent. Vault cash may and reserves with banks must be held on deposit with the Federal Reserve Bank of San Francisco.

† The requirement shown applies only to deposits due to other banks. Other demand deposits are subject to the requirements shown in Table 1.

‡ Large cities are defined as having populations of over 200,000 and medium cities as having populations of greater than 25,000.

would have been held in the absence of such regulations. Correspondent balances serve also to fill the liquidity and cash needs of commercial banks, and thus tend to be substitutes for vault cash. In those states in which vault cash requirements are high, for example, California and Rhode Island, vault cash and correspondent balances are not good substitutes. The load factors of non-member banks many be reduced in such a case even though the overall effective reserve requirement does not appear to be profit-inhibiting for the average bank.

System reserve requirements in excess of vault cash must be held on deposit with the local Reserve Bank. From the data in Table 1, it is apparent that a member bank is likely to have a higher ratio of cash reserves to total deposits than if it withdrew from the System and fulfilled state requirements. Possible exceptions are banks, in certain states, with unusually high or low proportions of time

Table 3

Membership in the Federal Reserve System of State Banks by State, December 28, 1962

State	Number of Insured State Banks	Number of Member State Banks	Number of Uninsured State Banks	Percentage Membership of Insured State Banks (3÷2)
Alabama	169	24	—	14.20
Arkansas	180	21	4	11.67
California	78	17	6	21.79
Colorado	85	17	32	20.00
Connecticut	36	7	8	19.44
Florida	210	10	3	4.76
Georgia	311	15	55	4.82
Illinois	591	123	6	20.81
Indiana	309	100	7	32.36
Iowa	555	66	20	11.89
Kansas	422	44	3	10.43
Kentucky	257	14	11	5.45
Louisiana	152	11	1	7.24
Maryland	72	7	1	9.72
Massachusetts	64	19	4	29.69
Michigan	286	131	2	45.80
Minnesota	506	27	8	5.34
Mississippi	163	7	2	4.29
Missouri	536	91	12	16.98
Montana	79	45	1	56.96
Nebraska	275	15	30	5.45
New Jersey	90	55	3	61.11
New York	131	94	17	71.76
North Carolina	132	4	1	3.03
North Dakota	115	2	4	1.74
Ohio	343	137	1	39.94
Oklahoma	187	25	2	13.37
Oregon	34	3	2	8.82
Pennsylvania	205	59	10	28.78
South Carolina	112	6	4	5.36
South Dakota	139	24	—	17.27
Tennessee	216	8	5	3.70
Texas	544	88	17	16.18
Utah	37	13	4	35.14
Virginia	165	66	—	40.00
Washington	66	9	1	13.64
West Virginia	105	33	1	31.43
Wisconsin	466	58	3	12.45

Note: States not listed possess less than 35 insured banks.

Sources: F.D.I.C. **Report of Call No. 62,** December 28, 1962, and **Federal Reserve Bulletin,** April, 1963, p. 552.

Table 4

Factors Affecting Proportionate Membership of State Banks

State	Number of Insured Banks not on Par List *	Differences in Load Factors of Member and Non-Member Banks.† (percent)	Mean Asset Size of Insured State Banks ‡ ($1,000's)
1. New York	—	11.5	333,635
2. New Jersey	—	2.7	43,458
3. Montana	—	4.5	6,406
4. Michigan	—	1.7	18,867
5. Virginia	1	4.5	10,785
6. Ohio	—	3.3	19,188
7. Utah	—	5.6	17,720
8. Indiana	—	2.1	7,212
9. West Virginia	—	4.2	7,038
10. Massachusetts	—	4.9	33,938
11. Pennsylvania	—	10.9	34,779
12. California	—	6.5	120,783
13. Illinois	—	5.5	11,805
14. Colorado	—	7.5	8,748
15. Connecticut	—	5.8	44,921
16. South Dakota	103	1.6	3,181
17. Missouri	40	5.2	9,389
18. Texas	12	3.9	6,680
19. Alabama	81	— 0.8	4,657
20. Washington	—	3.2	6,244
21. Oklahoma	2	2.0	3,177
22. Wisconsin	—	3.8	5,536
23. Iowa	—	3.7	4,730
24. Arkansas	100	1.4	4,715
25. Kansas	—	3.6	3,376
26. Maryland	—	6.6	19,380
27. Oregon	—	3.4	9,504
28. Louisiana	102	— 1.6	8,568
29. Nebraska	—	2.2	2,416
30. Kentucky	—	10.0	6,787
31. South Carolina	54	1.8	4,556
32. Minnesota	394	2.6	3,488
33. Georgia	220	5.4	5,459
34. Florida	37	2.9	10,690
35. Mississippi	132	1.3	7,412
36. Tennesee	67	0.5	6,102
37. North Carolina	59	7.1	19,152
38. North Dakota	93	n.a.	3,376

Note: States are listed in order of their proportionate membership of insured State Banks: see Table 3.

* This estimate of the number of insured banks clearing at par has been derived by subtracting from the number of non-par banks in any state, the number of non-insured banks. Sources: **Federal Reserve Bulletin,** April, 1963, p. 552, and **49th Annual Report of the Board of Governors of the Federal Reserve System,** Washington, 1963, p. 167.

† The figures show the difference in cash holdings of member and non-member banks as a percentage of total assets. The larger the number, the more favorable the load factor of the non-member banks as compared with member banks. Source: F.D.I.C. **Report of Call No. 62,** December 28, 1962.

‡ Source: **ibid.**

deposits, and member "country" banks which would become "noncountry" state banks if they became subject to the state requirements. The differences in the load factors of state member and non-member insured banks are given by state in Table 4.

The question of whether banks get from their correspondents "free" services to the value of the opportunity cost of the balances held with them is not subject to analysis on an aggregate basis. There can be no doubt that correspondent banks supply services which the Federal Reserve System either cannot or does not choose to offer, and that, to some extent, the maintenance of a correspondent relationship with a nearby bank may reduce the degree of competition which a small bank might otherwise experience from the larger bank.[11] However, in the case of non-member banks, the maintenance of correspondent balances is costless in the degree that such balances satisfy legal reserve requirements which otherwise would have to be held in the form of vault cash. For member banks, correspondent balances do not count toward required reserves, and, therefore, the services of correspondent banks cannot be obtained without some opportunity cost.

Some states give banks under their jurisdiction the option of carrying some portion of their reserve in the form of securities. The possibility that such an option will influence the rate of return on a bank's earning assets has been discussed above and found to be negligible. There would, therefore, seem to be no valid reason for regarding the reserves kept in the form of earning assets as affecting the rate of return on capital, and such reserves may be ignored in the calculation of what may be termed "effective" reserve requirements. Under this approach, the number of states without effective reserve requirements would be increased from one (Illinois) to three (Colorado, Florida, and Illinois). In 1962, non-member insured banks in these three states held cash assets to the extent of 12.44 percent of their deposit liabilities. Of these assets, 2.01 percent was held as vault cash, 9.84 percent as correspondent balances, and the remainder was held mainly in the form of uncollected cash items.[12]

From these data, we may gain some idea as to what proportion of its deposits a bank with no explicit cash requirement will hold in the form of non-earning assets. Obviously, such a measure can be no more than a very rough approximation, because of the very large number of factors which will affect the optimum value of cash holdings. But following this standard, it may be inferred that any state which requires cash reserves in excess of 12½ percent of total deposits is restraining the profitability of the average bank under its jurisdiction. Some state requirements are thus clearly without effect upon the profits of all but the most singular bank.[13]

If bankers, as a class, are truly long-run profit maximizing entrepreneurs, the severity of state reserve requirements in relation to System requirements would be a factor affecting the membership of insured state banks in the Federal Reserve System. Table 3 shows proportionate membership in states with more than 35 insured state banks. Table 4 shows the difference in cash holdings as a proportion of total assets of insured non-member and member banks by state. A glance at these data suggests that the difference in cash holding is not the primary determinant of the proportion of state banks which are members of the Federal Reserve Stytem.

[11] Tippets, *op. cit.*, p. 72.

[12] Computed from F.D.I.C., *Assets, Liabilities and Capital Accounts Commercial and Mutual Savings Banks, December 28, 1962,* (Washington, 1963). Hereinafter referred to as: F.D.I.C., *Call Data, December 28, 1962.*

[13] See Tables 1 & 2.

While the difference between load factors is not a significant variable in determining the different proportion of member banks among states, it would seem to be important for the individual bank. Between January 1960, and September 1961, thirty-seven state banks withdrew from membership in the system. These banks were asked for the reasons underlying their decision, and fifteen replies were received. All 15 banks cited the opportunity cost of maintaining balances with the local Reserve Bank as a prime reason for leaving the System. In 12 of the 15 cases, this was the only reason given, and five of these twelve banks paid compliments to their Reserve Bank in their reply. Two banks made minor adverse comments, but the level of reserves held inactive was the main reason given. For only one bank of the fifteen was the level of required reserves not the chief motivation indicated. This sample is far too small to support any general conclusions, but the near unanimity does suggest that if gross disparities between the reserve requirements of states and the Federal Reserve System were created, a noticeable decline in the number of member banks could result.

II. *Bank Profitability and Federal Reserve Membership*

The decision to apply for membership in the Federal Reserve System is an individual decision on the part of the bank's directors. The desire for prestige, for liquidity, for profits, and for safety may all influence a bank's incentive to seek or retain Federal Reserve membership. While it may be expected that such attributes will be randomly distributed throughout the nation, there are also good reasons for expecting some regional influence on these attributes. Decisions regarding membership may be influenced in part by the historical attitudes of given states or areas toward the creation of a federally-dominated central bank. Further, the decision to become a member bank is not completely independent of the decisions of competing banks. The fact that competing member banks were implying in their advertising that membership "was at least desirable, if not safer than non-membership," was the reason given by a newly-formed commercial bank in Pennsylvania for becoming a member.[14] States which contain regional financial centers can also be expected to have a higher proportionate membership, because of the competition among banks in the center to attract correspondent balances from member banks in outlying areas.[15] Member banks are restricted in the maximum balance which may be held with non-member banks.

Other factors which may affect proportionate membership are the minimum capital required of member branch banks, and the unwillingness of banks previously excluded because of insufficient capital to apply for membership. These factors suggest that proportionate membership will be lower in states which have a greater porportion of small banks. Moreover, in relatively sparsely populated states in which branch banking is permitted, minimum capital requirements will constitute a barrier to entry into the Federal Reserve System, because the prerequisite increase in capital would diminish the leverage obtainable on the existing capital. This factor may be a partial explanation of the low membership ratio in North Carolina. In this state, 61 state banks operate 431 branches.[16] While some of these banks operate branches only in

[14] Given in a private letter.

[15] Joseph Earle Birnie, "Pros and Cons of Membership in the Federal Reserve System," a paper presented at the *Advisory Council Meeting, Financial General Corporation*, Clearwater, Florida, March 24, 1960. Mr. Birnie is president of the Bank of Georgia in Atlanta.

[16] These data apply to December 1962. Source: *Federal Reserve Bulletin*, April 1963, pp. 551 and 552.

their head office cities, the majority of them have out of town branches.

These factors, which may influence the proportionate membership in any particular state, are obviously of considerable importance to certain individual banks. However, these variables are in no way subject to quantification, and their importance as a determinant of proportionate membership cannot be assessed statistically.

Member banks are not permitted to charge exchange on checks forwarded to them by the System. Therefore, the greater the prevalence of nonpar banking in any state, the smaller is the proportionate membership of state banks. Table 4 shows clearly that those states in which nonpar banks are numerous tend to have a low membership.

However, the number of nonpar banks is not a complete explanation of the variation in proportionate membership. In December 1962, 17.89 percent of all insured state banks which were members of the Federal Reserve System possessed 66.63 percent of the assets of all insured state banks. This fact suggests that the size of the state bank is an important factor influencing membership.[17] The advantages of membership in the System—the availability of an open line of short-term credit,[18] the statistical reports and economic intelligence furnished by the System, wire transfer facilities, and the ability to attract greater correspondent balances from member banks—are all likely to be of greater relative importance to the larger bank. Table 4 shows the average asset-size of state member banks by state. The average asset-size was rank correlated with the proportionate membership of state banks. Kendall's rank correlation coefficient (tau) was found to be positive (+.3428), which is statistically significant at the 0.01 confidence level with 38 observations.[19]

Two reservations need to be made about the positive result obtained by the rank correlation test. First, no data are available on the asset-size distribution of banks in an individual state, so that no concept of the variance of the size of the banks is obtainable. Secondly, the average size of banks is likely to be highly correlated with proportionate membership, because of attributes of bank size other than the variation in the relative advantages of membership which accrue to larger banks (e.g., the erstwhile minimum capital requirements for membership will have excluded many smaller banks, and nonpar banks have been found to consist largely of very small banks).

III. *The Decline in Reserve Requirements*

The reserve requirements of member banks have in recent years been progressively reduced. The avowed purpose of this gradual decline in the level of required reserves has been the secular expansion of the money supply. This method of increasing the money supply might have been expected to make membership in the System less unattractive by narrowing the difference between the

[17] F.D.I.C., *Report of Call No. 62*, December 28, 1962, p. 3.

[18] Three independent studies have reported that bank deposit turnover tends to increase with bank size, so that the availability of temporary funds at the discount window will reduce the need for primary and or secondary reserves, thereby increasing the profitability of the bank. Frank E. Norton and Neil H. Jacoby, *Bank Deposits and Legal Reserve Requirements*, Los Angeles: University of California Printing Department, 1959, pp. 61-62. Donald D. Hester, "An Empirical Examination of a Commercial Bank Loan Offer Function," *Yale Economic Essays* II, (Spring, 1962), Appendix A. "Interpretation of Size-Cost Relationships in Banking," *Monthly Review* of the Federal Reserve Bank of Kansas City, (March, 1961), pp. 8-9.

[19] M. G. Kendall, *Rank Correlation Methods*, 2nd Ed., New York: Hafner Publishing Co., 1955. The data on which the correlation is based are given in Table 4.

Table 5

Ratios of Total Cash to Total Assets of Member and Non-member State Banks, 1951-1961
(percentages)

Year	Member State Banks	Non-member State Banks	Differences
1951	24.76	19.28	5.48
1952	24.86	19.43	5.43
1953	24.06	18.55	5.51
1954	22.79	18.07	4.72
1955	22.54	17.20	5.34
1956	23.08	17.02	6.06
1957	22.28	16.45	5.83
1958	21.90	15.83	6.07
1959	21.35	14.93	6.42
1960	21.79	14.76	7.03
1961	19.70	14.18	5.52

Source: F.D.I.C., **Annual Reports.** Data are averages of amounts reported for the call dates throughout the year.

load factors of member and non-member banks. In fact, this difference was not reduced between 1951 and 1961: the relevant data are given in Table 5.

There are four possible explanations of this phenomenon: (a) different changes in the ratios of time to total deposits for the two classes of banks; (b) different rates of deposit growth; (c) state reserve requirements may have decreased *pari passu* with System requirements; and (d) changes in the volume of cash assets held in excess of required reserves may have been different for the two classes of banks.

(a) The ratio of time to total deposits has increased for member state banks, from 22 percent in June 1952, to 34 percent in June 1962; for non-member banks, the ratio has increased form 35 percent to 44 percent.[20] These changes in deposit mix tend to favor the load factors of member banks over those of non-members.

(b) The average deposit size of state member banks has increased by 80 percent, and of non-members by 66 percent over the same decade.[21] The ability to economize on cash holdings increases with deposit-size, but probably at a decreasing rate. The greater absolute growth of member banks may have been counteracted to some extent if, as is likely, the growth of non-members was in a size range which yielded greater potential cash savings per unit of growth. Thus, this factor cannot explain satisfactorily the virtual constancy of the gap.

(c) In some states, reserve requirements have decreased since 1954.[22] The ratio of required reserves to total deposits has been computed for member State and non-member banks for June 30, 1954 and 1962. The average reserve requirement for member State banks has decreased by 1.39 percentage points, as opposed to a decline of only .47 of one percentage point for non-member banks.[23] These computations significantly understate the change in the effective reserve requirement for member banks, since these banks were permitted to count vault cash toward reserves during this period.

(d) The volume of total cash holdings in excess of required reserves increased absolutely between 1954 and 1962 for both member and non-member banks.

[20] Computed from F.D.I.C. *Call Data.*

[21] The average deposit size of member banks has increased from $24,393,000 in 1954 to $46,119,000 in 1962: non-member banks have increased from $3,295,000 to $5,477,000.

[22] The load factor gap has actually increased since 1954—see Table 5.

[23] The data were computed from F.D.I.C. *Call Data* in the following way. It was assumed that all state banks were "country" banks. The reserve requirements for member banks were computed by applying reserve requirement ratios to deposit data. Non-member banks reserve requirements were computed by applying state reserve requirements to the deposits by non-member banks in the individual state and by summing the totals obtained. In both cases, the dollar volume of reserves was then divided by total deposits and the actual ratio of required reserves to deposits obtained. The as-

The increase has been considerably greater for member banks.[24] Nearly all of this increase in excess cash holdings of member banks is ascribable to increases in "cash items in the process of collection." Cash and balances due from U. S. banks have declined more for member than for non-member banks. The increase in member banks' excess cash holdings would seem to be the main reason for the relative constancy of the difference between load factors.

The progressive lowering of reserve requirements by the Federal Reserve System has not made membership more attractive by providing a relative reduction in the load factor of member banks. Rather, the reduction in System requirements has prevented membership from becoming more unattractive, and the saving in cash assets needed for required reserves has offset the increase in cash items in the process of collection. While this explanation is valid for the aggregate of state banks, the attractiveness of membership has been changed differently in different states, depending upon whether reductions in System requirements exceeded reductions by the individual state.

IV. *Conclusions*

Variations in state banking regulations would seem to exert their predominant, if not their only, influence on the profitability of commercial banks through their effects upon the size of the load factor. The level of cash holdings of the banks in the three states which have no effective reserve requirements indicates that relatively few states have such severe requirements as to have any adverse influence on the profitability of banks under their jurisdiction. Variations in the optimum level of cash holdings, as determined by management in the light of the deposit structure, can obviously result in individual banks being restrained by the requirements in some states, even though the average bank is not so affected.

Membership in the Federal Reserve System involves an explicit cost, in that reserve requirements are likely to reduce the load factor of member banks compared with the alternative state requirements. The burden of System requirements may lie more in the inability of member banks to count correspondent balances toward reserves than in the absolute level of the reserve requirements. As the schedule of interest rates rises—particularly the short-term rate—this cost of membership increases. On the other hand, membership offers a return in the form of prestige and the privileges and free services which the System offers. Larger banks will tend to derive proportionately greater benefits from these privileges and services. Nonetheless, increases in the cost of membership are likely to result in net reductions in the number of state member banks (and may possibly lead national banks to seek state charters to escape these costs), if the values placed upon the serv-

sumption that all non-member banks were country banks is invalid and the required reserve ratios should not, therefore, be taken as valid calculations of the absolute level. However, since the error was repeated for both dates, the figures given for the two reductions in reserve requirements are probably satisfactory estimates. In the case of non-member banks cash requirements only were used; i.e., Florida was deemed to have no reserve requirement. Actual reserve ratios computed were: member banks, 1954, 11.01 percent; 1962, 9.62 percent: non-member banks, 1954, 8.22 percent; 1962, 7.65 percent. State reserve ratios were obtained from *Compilation of Federal and State Laws*, *loc. cit.*, for 1954 and 1962.

[24] Total cash holdings in excess of required reserves were: member banks, 1954, $6.3 million; 1962, $9.0 million; non-members, 1954, $2.4 million, and 1962, $2.6 million. Cash and balances with U. S. banks held in excess of required reserves were: member banks, 1954, $3.5 million; 1962, $1.6 million; non-members, 1954, $2.16 million; 1962, $2.24 million.

The method of computation is the same as that outlined in footnote 23 above.

ices provided by the System do not increase equally. Despite the decline in System reserve requirements in recent years, the average burden of membership has not been reduced. The disparity between the load factors has remained unchanged, while the opportunity cost of holding idle funds has increased. However, the reduction in System requirements has prevented the load factor gap from increasing, and the value placed upon access to the discount window will be enhanced in the degree that the smaller banks become less liquid. The danger of banks renouncing membership in order to reduce costs is still present, and the Federal Reserve System has so far only held its own.

► CHARLES SCHOTTA, JR.

The Performance of Alternative Monetary Rules in Canada, 1927-1961

A series of statistical tests was recently applied by Professor Bronfenbrenner to four alternative monetary rules for the United States utilizing data for 1901 to 1958.[1] This paper applies the Bronfenbrenner tests to Canadian monetary data for the period 1927-1961.

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The work reported in this paper is part of a larger study of monetary policy in Canada which Keith Hay and I are conducting. I am indebted to Keith Hay for helpful discussion, to David Labovitz for constructive comments, and to the Earhart Foundation for providing financial assistance during the research. None of the above are responsible for any conclusions expressed herein.

[1] M. Bronfenbrenner, "Statistical Tests of Rival Monetary Rules," *Journal of Political Economy*, LXIX, Feb. 1961, pp. 1-14.

In his paper, Bronfenbrenner tested the performance of four rival monetary rules: (1) the "judgment" rule (actually the result of whatever "discretionary" policy was followed); (2) a 3 percent variant of the constant yearly percentage increase in the supply of money; (3) a 4 percent variant of the same rule; and (4) a "lag" rule. Each of these was tested, utilizing two definitions of the money supply: the first, a "narrow" currency plus demand deposit concept; the second, a "broad" definition. Because of certain institutional differences between the payments arrangement in Canada and the United States, the same distinctions cannot be drawn; hence, only one money supply concept is used in this paper. The performance of the first three rules is calculated for both retail and wholesale prices. The "lag" rule is not tested.

I. *The Form of the Tests*

In order to compare the performance of these alternative rules, Bronfenbrenner first constructed an "ideal" pattern of yearly percentage change in the money supply; ideal in the sense that if price level stability were the desired goal, and if the pattern were followed, the goal would be achieved (assuming certain reactions in the economy).[2] Moving from the Fisher equation of exchange in its "income" form of

(1) $MV = PY$

(where M is the money supply, V an index of velocity, P an index of prices, and Y an index of physical output) to the differential form of

$$(2)\ \frac{dM}{M} + \frac{dV}{V} = \frac{dP}{P} + \frac{dY}{Y}$$

he identifies an ideal pattern of monetary change with a constant price level where dP is zero. Or, as he puts the matter:

> This means that the ideal growth rate of the money supply equals the growth rate of real income minus the growth rate of velocity.

When dP has not in fact been zero, the actual growth rate of the money supply has been

$$\frac{dM}{M} = \frac{dY}{Y} - \frac{dV}{V} + \frac{dP}{P}$$

so that

$$\frac{(dM)}{(M)O} = \frac{dM}{M} - \frac{dP}{P}.^{3} \qquad (4)$$

In Bronfenbrenner's equation (4) above, $\frac{(dM)}{(M)O}$ is the "ideal" percentage yearly change in the money supply, the one which will produce price stability, given his assumptions. I have calculated the "ideal" pattern of percentage yearly change in the Canadian money supply, both for retail and wholesale prices, using (4) above as the computing equation.

In his paper, Bronfenbrenner indicates in considerable detail the special assumptions which underlie his analysis.[4] The special nature of these assumptions and the perspective from which both Bronfenbrenner's results for the United States and those derived from methods similar to his should be interpreted are discussed by Tucker.[5] The meaning of these problems for the results of this paper will be discussed in section V.

II. *Calculation of the "Ideal" Pattern*

The estimates of the Canadian money supply used are those developed by Hay.[6] Although these estimates exist in his study for the years from 1913, compatible price series extend only from 1926. In his paper, Hay also discusses the differences between the institutional payments arrangements in Canada and the United States, which render the distinction between "narrow" and "broad" definitions

[2] It should be remembered in the interpretation of the test results that, in order to compare the performance in a meaningful way of any monetary rule with the "ideal" constructed pattern of monetary change, it is necessary that in *each* of the years in which performance is tested price stability has been the explicit rationally-pursued policy goal.

[3] Bronfenbrenner, *op. cit.*, p. 2.

[4] *Ibid.*, pp. 3-4. The specific assumption most crucial and, not oddly, most open to question on factual grounds is that the effect of changes in the money supply on the price level be worked out completely in a single calendar year.

[5] Donald P. Tucker, "Bronfenbrenner on Monetary Rules: A Comment," *Journal of Political Economy*, LXXI, April 1963, pp. 173-79.

[6] K. A. J. Hay, "National Income, the Money Supply, and their Relationship; The Canadian Case, 1913-1961," Unpublished manuscript, Brown University, 1963.

of the money supply unimportant in the Canadian case.[7] In general, the money supply series used includes total issue of banknotes outside banks, total coinage, currency outside banks, demand deposits, and savings deposits.

The price series used are those developed by the Dominion Bureau of Statistics for 1926-1961, published in the *Canadian Statistical Review*.[8] Although Hay's velocity series for Canada was available, the more convenient form of equation (4) was used for computation.[9] The results obtained are identical.

Table 1 presents the computed "ideal" patterns of percentage growth rate in the Canadian money supply, 1927-1961, excluding the "war years," 1942-44 inclusive, as not being comparable to the other years because of such factors as controls, for example. Pursuit of the "ideal" pattern would have led to monetary contraction in the years given in Table 2. Interestingly enough, Bronfenbrenner's analysis of the United States data produced contractions as recommended policy in approximately the same years.[10] In this connection, the dissimilarity of the Canadian and the American depression timing is interesting.[11]

Table 1

Ideal Patterns of Percentage Growth Rate in the Canadian Money Supply

Year	Retail Prices	Wholesale Prices
1927	7.1	7.8
1928	6.6	8.5
1929	2.0	3.9
1930	−6.6	2.5
1931	6.7	15.9
1932	2.9	1.0
1933	4.1	− 1.4
1934	.5	− 4.6
1935	5.7	5.1
1936	5.2	4.7
1937	3.0	− 4.1
1938	.6	7.3
1939	9.2	11.2
1940	2.3	− 2.1
1941	4.5	2.9
War Years, 1942-44 excluded		
1945	4.1	3.5
1946	1.3	− .4
1947	−5.9	−12.2
1948	−6.3	− 7.7
1949	.8	1.3
1950	3.5	.2
1951	−9.4	−12.0
1952	4.6	13.3
1953	4.0	7.3
1954	5.4	7.8
1955	.5	− .2
1956	−1.0	− 2.6
1957	1.0	3.3
1958	7.3	9.7
1959	− .7	− .8
1960	4.0	5.1
1961	7.3	7.2

[7] Hay, *op. cit.*, pp. 2-6.

[8] *Canadian Statistical Review*, Ottawa: Dominion Bureau of Statistics, 1961, pp. 58-59.

[9] Hay has developed velocity estimates for Canada for 1913 to the present. He finds a rising secular trend in velocity during the period, contrary to all but about seven of the past years since 1900 in the United States. Unfortunately, the use of this velocity series would have necessitated the acquisition of employment and productivity indices for Canada, presently unobtainable in the form necessary for my purpose.

[10] Bronfenbrenner, *op. cit.*, p. 6 (See Table 1).

[11] Hay, *op. cit.*, p. 8. "Without attempting to draw any inferences with respect to the efficacy of changes in the money supply, it is worth noting at least one case in which American and Canadian experience differed. In the 'Great Depression,' the severest contraction of the American money supply, −12.12 percent, occurred between 1929 and 1930, a year which also saw the severest contraction of American GNP. In Canada, 1929-30 marked neither the severest contraction in money supply nor GNP. In fact, these events took place in 1928-29 and 1931-32 respectively."

Table 2

Years of Contraction under "Ideal" Pattern of Percentage Growth Rate in the Canadian Money Supply, 1927-1961

Price Index	Years
Retail Prices	1930, 1947, 1948, 1951, 1956, 1959
Wholesale Prices	1933, 1934, 1937, 1940, 1946, 1947, 1948, 1951, 1955, 1956, 1959

Table 3

Actual Pattern of Percentage Growth Rate in the Canadian Money Supply, 1927-61

Year	Percent	Year	Percent
1927	5.4	1945	4.6
1928	7.1	1946	4.5
1929	3.1	1947	2.7
1930	– 7.3	1948	7.9
1931	– 4.2	1949	3.8
1932	– 7.2	1950	6.3
1933	– .8	1951	.1
1934	1.8	1952	7.0
1935	6.2	1953	4.9
1936	7.2	1954	6.1
1937	6.0	1955	.7
1938	1.7	1956	.4
1939	8.4	1957	4.1
1940	6.1	1958	9.9
1941	10.1	1959	.4
War Years, 1942-44 Excluded		1960	5.2
		1961	8.2

Table 3 above presents the actual pattern of percentage growth rate in the Canadian money supply for the period studied.

III. *The Comparison of the Alternative Rules with the "Ideal" Rule*

The history of monetary control in Canada has been quite unlike that in the United States, with the Bank of Canada playing a far less central role in the deliberate regulation of the money supply than has the Federal Reserve in the United States.[12] For that reason it is not useful to divide the period, 1927-1961, into the clearly-defined subperiods used by Bronfenbrenner for the United States data. Instead, the period has been divided into a pre-war and a post-war period, with the experience of each of the monetary rule alternatives compared for these subperiods and for the entire period.

Two tests of the performance of each alternative rule are provided by comparing the average yearly deviation of each rule from the "ideal" pattern. Following Bronfenbrenner, the yearly deviation, d_i, is defined as

$$d_i = \left(\frac{dM}{M}\right)_i - \left(\frac{dM}{M}\right)_o (i=1, 2, 3, \ldots.),$$

where $\left(\frac{dM}{M}\right)_i$ is the actual percentage growth rate of the money supply in year i. The average absolute deviation is then

$$\sum_{i=1}^{n} d_i \,/n$$

where n is the number of years in the subperiod or period. The average algebraic deviation is

$$\sum_{i=1}^{n} d_i \,/n.$$

Table 4 summarizes the average deviations of the alternative rules.

The absolute average deviation indicates the yearly variability of each rule relative to the "ideal" rule. The lower the figure, the better record of the rule in question *vis-a-vis* the "ideal" rule. This

[12] Hay, *op. cit.*, pp. 2-3. "Our results suggest that historically the Bank of Canada has either not sought or has been unable to vary the Canadian money supply to an extent comparable to the variations in the U. S. money supply."

Table 4

Average Deviations of dM/M from "Ideal" Values, Canada, 1927-1961*

Period	Discretionary Policy	3 Percent	4 Percent
	Wholesale Prices		
1927-1941	5.8 (−1.0)	4.5 (− .9)	4.4 (2.3)
1945-1961	4.4 (3.8)	5.6 (3.7)	5.8 (4.2)
Entire Period	5.1 (1.5)	5.1 (1.5)	5.1 (3.3)
	Retail Prices		
1927-1941	3.1 (− .8)	2.8 (− .6)	2.7 (.4)
1945-1961	3.3 (3.2)	4.3 (2.4)	3.8 (2.8)
Entire Period	3.2 (1.4)	3.6 (1.0)	3.3 (1.7)

*Figures in parentheses are average algebraic deviations.

comparison is meaningful only if the assumed policy of price stability actually prevailed in the year compared. The average algebraic deviation allows an estimate of the deviation of the rule tested from the "ideal" pattern in terms of a long-run movement. It serves to indicate the extent of any deflationary or inflationary bias in a particular rule. The lower the absolute value of the average deviation, the better the performance of the tested rule. Following Tucker, Table 5 presents a simple arithmetic mean of the average deviation figures of Table 4.[13] These summary figures represent the overall average percentage deviations from the "ideal" patterns.

From Table 5 it is apparent that discretionary policy (or whatever policy was, in reality, followed) scored better overall than either of the inflexible variants. On balance it is slightly more inflationary than the 3 percent variant but considerably less inflationary than the 4 percent variant. In terms of the yearly deviations from the "ideal" or "price stability" pattern of percentage change in the money supply, it is superior to either inflexible variant.

IV. *Summary of the Comparison of Alternative Rules*

In the average absolute deviation test, the discretionary policy is slightly superior to either inflexible rule for the entire period studied, when retail prices are used. When wholesale prices are used for the same period, all three rules score the same in the average absolute deviation test.

For the entire period, wholesale prices, the discretionary rule and the 3 percent variant score the same in the algebraic deviation test. Both are superior to the 4 percent variant. All three rules exhibit some degree of inflationary bias. When retail prices are considered for the same period, the 3 percent variant is slightly superior to the discretionary policy. The 4 percent variant scores last. As was the case for wholesale prices, all three rules exhibit some inflationary bias.

During the first subperiod, 1927-1941, when retail prices are considered, the 4 percent variant is superior to the other two rules by a small margin on both the

[13] Tucker, *op. cit.*, p. 176 (See Table 2).

Table 5

Summary of Performance of Alternative Monetary Rules

Rule	Average Absolute Deviation		Average Algebraic Deviations	
	Score	Rank	Score	Rank
Discretionary	4.1	1	1.3	2
3 Percent	4.3	3	1.2	1
4 Percent	4.2	2	2.3	3

average absolute deviation and the average algebraic deviation tests. It exhibits a slight inflationary bias, while the other two exhibit slight deflationary biases.

In the same pre-war subperiod with respect to wholesale prices, the 4 percent variant is again superior to the other two rules in both tests. The 3 percent rule is second in the average absolute deviation test. In the average algebraic deviation test, the discretionary policy is second. Both the 3 percent rule and the discretionary rule exhibit slight deflationary biases during this subperiod. The 4 percent rule is slightly inflationary.

In the post-war period, 1945-1961, both for wholesale and retail prices, the discretionary rule is superior to either of the other alternatives in the average absolute deviation text.

For the same period, both for wholesale and retail prices, the 3 percent variant is superior to the other alternative rules for the average algebraic deviation test. The discretionary rule is second for wholesale prices while the 4 percent variant is second for retail prices. All three rules exhibit inflationary biases during the post-war period.

The relative performance of discretionary policy is better in the post-war period than in the pre-war period. Hay indicates that only since 1954 has the Bank of Canada possessed strong monetary control powers and used them vigorously.[14] Prior to that time the discretionary rule may have been more haphazard than planned, with the result that there were improvements in the later period.

V. *Interpretation of the Results*

In this section the results of the analysis of the Canadian data are compared with Bronfenbrenner's results for the United States. Perhaps the major difference between the Canadian and the United States monetary experience over the comparable years is the conclusion concerning the relative efficacy of a "discretionary policy." Bronfenbrenner finds that the "inflexible rule" is superior to "discretionary policy" in the United States, while the reverse appears true in Canada. Interestingly enough, both in Bronfenbrenner's study and in my analysis, "discretionary" policy appears superior to either "inflexible rule" in the post-war period.

Why should this be the case? Recall that the Bank of Canada was not established until 1935; and that it was not actively pursuing any substantial monetary policy until the last decade. Recall too, that for the comparison of performance data to be meaningful; the explicit policy followed in any year should have been one of price stability. If the policy actually followed during a particular year was not one of price stability, the resulting deviation from the "ideal" pattern is difficult to interpret as being a measure of the "effectiveness" of monetary policy. As Hay points out, it is extremely doubtful that monetary policy in Canada could be classed as following any single pattern before the beginning of the post-war period. It may be more accurate to characterize pre-war policy as a sort of hit-or-miss set of miscellaneous actions. If this was indeed the case, the meaning of the pre-war relative performance measures becomes even more difficult to interpret.

[14] Hay, *op. cit.*, p. 2.

With respect to the relative performance of the inflexible rule in Canada, it may be the case that neither the 4 percent nor the 3 percent variants of the inflexible rule are the ones that should be tested. Certainly in the pre-war period, with respect to both wholesale and retail prices, the inflexible rules were superior to the policy actually followed. The difference was quite small, however. Also, there is reason to believe that the actual result of whatever may be called the "discretionary" policy was in fact something very close to an inflexible rule.[15]

If this is the case, and price stability was in fact the goal of Canadian monetary policy for the post-war years, the comparison of the relative performance of the "inflexible" rules and the "discretionary policy" becomes even more suggestive. Coupled with Hay's finding of an upward trend in Canadian velocity since 1913, the findings of this paper raise questions concerning the applicability of American monetary history to the economic experiences of other nations.

Of course, it is very much an open question whether any inflexible monetary policy, such as that advocated by Friedman, is in fact superior to a "discretionary" policy.[16] The tests on the Canadian data have only raised more questions to be settled by better tests of better data. It is difficult to attach too much importance to conclusions based on an analysis such as Bronfenbrenner's, which makes use of unrealistic assumptions concerning such factors as price flexibility, and neutrality of the form of monetary policy used. For this reason, the results of this paper cannot be regarded as a positive justification of discretionary monetary policy. Until an analysis is developed, which is sufficiently sophisticated to account for the actual intended policy in a particular year (rather than on the assumption that "price stability" was the major goal of the monetary authority), it will be difficult to demonstrate the truth or falsity of conclusions concerning the relative merits of alternative monetary rules.[17]

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[15] This conclusion is suggested by Hay's finding that the variance in the rate of change in the money supply in Canada, 1913-1961, was considerably smaller than that in the United States for the comparable period. Hay, *op. cit.*, p. 8.

[16] Milton Friedman, *A Program For Monetary Stability*, New York: Fordham University Press, 1959, Chapter IV. In this connection, at least with respect to the Canadian case where, as Hay shows, velocity has been increasing secularly since 1913, the magnitude of the inflexible percentage change in the money supply which Friedman recommends, 4 percent, may have to be reinterpreted. Apparently a portion of this figure of 4 percent is an allowance of "1 per cent to allow for a secular decrease in velocity." (*Monetary Stability, op. cit.*, p. 91.)

[17] Donald Tucker, in a letter to the author, dated May 28, 1963, feels that his "Bronfenbrenner on Monetary Rules: A Comment," was ". . . merely a way of pointing out weaknesses in Bronfenbrenner's analysis. For all I know, Bronfenbrenner's conclusion may be absolutely correct (although I doubt it); the point is that his analysis is incapable of demonstrating its truth or falsity. . . ." From the space devoted to justifying the usefulness of his assumptions, (pp. 3-4), Bronfenbrenner seemed aware of their less than satisfactory nature. Recently Bronfenbrenner has reaffirmed his basic position. See M. Bronfenbrenner, "The Case for a Monetary Rule," Ditto-process manuscript, Graduate School of Industrial Administration, Carnegie Institute of Technology, 1963.

The Philadelphia National Bank Case: A Rejoinder

► EMANUEL CELLER

In the first issue of *The National Banking Review* three well-written, thoughtful comments [1] addressed themselves to the issues involved in the *Philadelphia National Bank* case [2] recently decided by the Supreme Court. All three comments questioned the soundness of the Court's invalidation of a proposed merger of Philadelphia National Bank with the Girard Trust Corn Exchange Bank, another Philadelphia bank.

Since I approve that decision, it may serve a useful purpose to take issue with some of the premises and concepts advanced in those comments. I would be the first to admit that I do not possess the everyday banking expertise of the Office of the Comptroller of the Currency. I am not, however, without practical banking experience, nor without experience in antitrust matters.

I. *Concentration—Fact or Fancy*

Messrs. Carson and Horvitz contend that, rather than a pervasive increase in the concentration of bank assets in relevant banking markets,[3] a study of forty-six major banking markets during 1939-1959 shows a tendency toward a reduction in bank concentration. They assert that only in 14 areas did the concentration ratio of the largest bank increase, while in 31 areas there were decreases. With slight variation, they say, this holds true of the market share of the two largest, the three largest, and the four largest banks.

Let us observe the other side of the coin. In 1960 the five largest commercial banks in every large metropolitan area, save two, held more than 50 percent of the commercial bank deposits. In the majority of such areas they held over 75 percent of such deposits. In 26 of such areas the five largest commercial banks held over 90 percent of all commercial deposits.[4]

At the end of June 1962, the five largest banks held over 50 percent of the commercial bank deposits in all the large metropolitan areas. At the end of June 1962, there were 33 metropolitan areas in which the share of the top three had declined, and 32 in which it had increased since June 30, 1960. During the same period the share of the top five declined in 27 areas, increased in 35, and remained the same in three.[5] At the end of June

Emanuel Celler is a member of the House of Representatives, and Chairman of the House Judiciary Committee.

[1] David C. Motter, "Bank Mergers and Public Policy," *The National Banking Review*, 1, Sept. 1963, p. 89; Victor Abramson, "Private Competition and Public Regulation," *Ibid.*, p. 101; Deane Carson and Paul M. Horvitz, "Concentration Ratios and Competition," *Ibid.*, p. 105.

[2] *U. S. v. The Philadelphia National Bank, et al.*, 374 U.S. 321 (1963).

[3] "Concentration Ratios and Competition," *op. cit.*, pp. 105-106.

[4] *Annual Report of the Federal Deposit Insurance Corporation*, 1960, pp. 102-103 (hereafter referred to as FDIC).

[5] *Annual Report of the FDIC*, 1962, pp. 56-57. Inclusion of bank groups would augment this picture of concentration.

1962, there were 33 large metropolitan areas in which five banks had more than 90 percent of the commercial bank deposits.[6] In most of the metropolitan areas, three commercial banks, at the end of June 1962, held over 75 percent of the commercial bank deposits.[7]

In the Buffalo metropolitan area, in 1958, the five largest commercial banks had over 95.2 percent of all commercial bank deposits; in the Rochester metropolitan area, 99.6 percent; in the Syracuse metropolitan area, 97.6 percent; in the Albany-Schenectady-Troy metropolitan area, 81.2 percent.[8] At the end of June 1962, the respective concentration percentages were 97 percent, 99.5 percent, 98.9 percent, and 82.6 percent.[9] Out of 81 metropolitan areas, in June 1962, two banks had over 50 percent of deposits in 59 of such areas, and over 60 percent in 40 of such areas.[10]

At the beginning of 1961, one bank controlled 92.6 percent of all commercial banking assets in Binghamton, New York. One bank controlled 45.6 percent of the bank assets in Utica, New York; one bank held 43.9 percent of the local bank assets in Rochester, New York; one bank held 41.1 percent of the bank assets in Albany, New York; one bank had 34.2 percent of the bank assets in Syracuse, New York; and a single bank had 32.9 percent of the bank assets in Buffalo.[11] In one New York County, one bank had up to 66 percent of the banking deposits in the county. In Albany County, one bank had over 28 percent of the bank deposits and more than 65 percent of the IPC demand deposits. In Monroe County, one bank had over 33 percent of the deposits and almost 33 percent of the IPC demand deposits. In Broome County, one bank had over 31 percent of the bank deposits and over 57 percent of the IPC demand deposits.[12] The merger history of the banks which had achieved this position was extensive. In one instance, 16 mergers occurred between 1945 and 1960.

Table

Concentration of Commercial Bank Deposits in Largest Metropolitan Areas, June 30, 1962

	Two Largest Banks Over 50% Deposits	Over 60% Deposits	No. of Areas
States w/statewide branch banking	19	16	20
States w/limited branch banking	29	18	40
States w/unit banking	11	6	21

According to a complaint filed in 1961 by the Department of Justice to try to prevent the merger of the Manufacturer's Trust Company with the Hanover Bank, the five largest banks in New York City held 75.2 percent of the total commercial bank deposits in New York City, and 77.2 percent of the total commercial loans. If this is so, it is significant that from December 31, 1956,[13] to some time in 1961, whether we use assets, deposits, or loans as the criterion, there had been an increase of from 9 to 10 percent in commercial bank concentration in New York City.

At the end of 1962, in only one of 16 states with statewide branch banking privileges did the top three commercial banks have less than 42 percent of the

[6] *Ibid.*, pp. 56-57.

[7] *Ibid.*

[8] Staff Report to House Committee on Small Business, Banking Concentration and Small Business, 86th Cong., 2d sess., pp. 28-29.

[9] *Annual Report of the FDIC*, 1962, p. 56.

[10] *Federal Reserve Bulletin*, 49, 1963, p. 1321.

[11] Information in Morgan New York State Corporation merger application before Federal Reserve Board.

[12] *Ibid.*

[13] Supplemental Report and Recommended Decision of Hearing Examiner in the Matter of Merger Application of First New York Corporation to form a holding company. Federal Reserve Board Docket Nos. BHC 1-3 (7/10/58), p. 3.

deposits of all commercial banks; in only five of such states did they have less than 61.9 percent.[14] In two of such states the largest bank or bank group had over 50 percent of the deposits of all commercial banks in those states.[15]

In statewide branching states there has been an appreciable increase in concentration of deposits. In the period 1952 through 1962, the 25 largest banks, which represent about two percent of the total number of banks, increased their share of deposits from about 62 percent to 71 percent.[16]

In 1958 the ten largest commercial banks had 19.9 percent of the deposits of all the commercial banks in this country.[17] As of December 31, 1960, the ten largest held 20.1 percent of all commercial bank deposits.[18] As of December 28, 1962, they had 20.9 percent.[19] At the end of 1962, 10 commercial banks and bank group had 21.8 percent of the total deposits of commercial banks in the United States, and five had 14.6 percent.[20]

As of December 28, 1962, in seven states three banks held 75 percent or more of all the commercial bank deposits.[21] At the end of 1962, 100 largest banks had a higher percentage of total deposits (48 percent) than in 1952.[22]

As one member of the Federal Reserve Board said in support of the 1960 Bank Merger Act, "whenever you get a banking system where, as in this country, less than 3 percent of the banks have more than 63 percent of the deposits of commercial banks, I think you are getting into a dangerous area."[23]

I do not think it needs a Descartes to prove that concentration in banking exists.

And the picture is not otherwise as to Philadelphia. It would appear from the government's trial brief, moreover, that the merger would have led to two banks having more than 64 percent of assets of banks in Philadelphia; the four largest commercial banks with head offices in the four-county area would have had about 74 percent of total IPC deposits; the resulting bank would have had 37 percent of all IPC demand deposits of commercial banks with home offices in Philadelphia.

The merger would have resulted in a concentration of 42 percent of the commercial and industrial loans of all commercial banks with head offices in Philadelphia. The merger would have resulted also in two banks having almost 60 percent of the consumer credit business. The percentage would be even higher as to deposits due to banks.[24]

The use of concentration ratios are decried as an approach to the question of competition. It is said that a decline in the number of banks in the nation does not "*necessarily*" and inevitably reduce the strength of competitive forces.[25] This

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[14] *Annual Report of the FDIC*, 1962, p. 55.

[15] *Ibid.*

[16] *Federal Reserve Bulletin*, 49, 1963, p. 1196. See also *Annual Reports of the FDIC*, 1960, p. 102, and 1962, p. 56.

[17] *Annual Report of the FDIC*, 1960, p. 51.

[18] *Ibid.*, p. 100.

[19] *Annual Report of the FDIC*, 1962, p. 53.

[20] *Ibid.*

[21] *Ibid.*, p. 55.

[22] "Changes in Banking Structure, 1953-62," *Federal Reserve Bulletin*, 49, 1963, pp. 1191, and 1194.

[23] Hearings before Senate Committee on Banking and Currency, 86th Cong., 1st sess., 1959, p. 63. Compare the following statements: "Although the few comparatively large institutions hold a high proportion of the total assets, the savings and loan business does not show the marked concentration characteristic of commercial banking and most other industries." *1963 Savings and Loan Fact Book*, Chicago, Illinois: U.S. S&L League, p. 79.

"Concentration is apparent in many large cities." George E. Lent, *The Changing Structure of Commercial Banking*, Hanover, N.H.: Amos Tuck School of Business Administration, 1960, p. 14. Philadelphia is one of such cities according to the author.

[24] Government Post Trial Brief, pp. 24 et seq.

[25] Carson and Horvitz, *op cit.*, pp. 105-106.

is a straw man. The argument is not in terms of inevitability. Nor is it one purely of numbers. The argument is in terms of probability, of potentiality, of the cause of the decline, and of the decline in regions, in cities, as well as nationwide.

It is interesting to note that the list of situations which are spelled out by Messrs. Carson and Horvitz to show that banking concentration as a *per se* test is hazardous in evaluating market competition,[26] is quite similar to those recognized by the courts in nonbank cases arising under section 2 of the Sherman Act.

II. *Merger as a Cause of Bank Concentration*

What has been the enervating process by which the diminution in the number of competitive banks has occurred? From 1950 to the end of 1960, over 1,600 banks were absorbed by other banks. These absorbed banks had resources of almost $33 billion dollars.[27]

It is an undeniable fact that the problem of mergers in the banking field has been thought acute enough so that within the past seven years Congress, with the active support of the Executive Branch of the government, has considered it necessary to enact two statutes in an attempt to slow down the merger parade.[28]

In 1940, there were 14,399 commercial banks in the United States; in 1950, 14,164; in 1960, 13,472;[29] at the end of 1962, there were 13,429.[30] It is apparent that the rate of disappearance has been greater in the last decade than in the preceding decade.

Testifying in support of the Bank Merger Act of 1960, I pointed out, in 1959, that in ten of the nation's sixteen leading financial centers, four banks owned more than 80 percent of all commercial assets. I added that, in nine of these financial centers, two banks owned more than 60 percent of all commercial assets. Furthermore, I testified that, in each of sixteen financial centers, the first four banks owned 60 percent of all the commercial assets; and the first two banks, more than 40 percent. The cause of such concentration, I made clear, was that in the period 1950 through 1958, some 1,330 of the nation's commercial banks disappeared by way of mergers and consolidations.

It has been noted that during the last decade there has been a persistent decline in the number of commercial banks in operation and that the recent decline "has reflected mainly mergers between solvent banks seeking to improve their competitive positions, whereas the earlier declines were primarily the result of bank failures." [31]

Between 1953 and 1962, there were 1,669 mergers and absorptions of commercial banks and 1,113 new banks organized.[32] States in which statewide branching is prevalent had a net loss of 330 banks in the ten-year period, a 25 percent decline. "Because of mergers, more than one in every three banks existing in 1952 was eliminated as a separate institution; and only 166 new banks were organized." [33]

And at least to some persons, myself included, it would seem a matter of concern to learn that in Delaware, in 1952, there were 35 commercial banks; in 1962, only 19, and in between there were 16 mergers and no new commercial banks. In Connecticut, in 1952 there were 112

[26] *Ibid.*, pp. 107-108.

[27] *Annual Report of the Comptroller of the Currency*, 1960, p. 16.

[28] Bank Holding Company Act of 1956, 12 U.S.C.A. Ch. 17; Bank Merger Act of 1960, 12 U.S.C.A. 1828(c).

[29] *Annual Reports of the FDIC*, 1950, 1956. *Federal Reserve Bulletin*, 47, 1961, p. 486.

[30] *Annual Report of the Board of Governors of the Federal Reserve System*, 1962, p. 164.

[31] "Changes in Banking Structure, 1953-62," *op cit.*, p. 1191.

[32] *Ibid.*, p. 1192.

[33] *Ibid.*, p. 1194.

commercial banks; in 1962, only 66, with 51 mergers having taken place and five new banks organized in that period.[34]

Since we are discussing banks in the Philadelphia area, it is not amiss to note that in the period December 1952-December 1962, there were four new commercial banks organized in Pennsylvania, while during the same period there were 304 mergers.[35]

III. *The Argument of Greater Concentration Elsewhere*

Mr. Motter admits that, if one accepts commercial banking as a line of commerce and the four-county area as a section of the country, there was concentration in that area, that mergers had added to such concentration in recent years, and that the proposed merger would add to that concentration significantly. But it is added, "'commercial banking' in Philadelphia is less concentrated than in a number of other financial centers."[36] This assertion is to be compared with the statement in the Court's opinion that, "indeed, the trend toward concentration is noticeable in the Philadelphia area generally, in which the number of commercial banks has declined from 108 in 1947 to the present 42."[37]

It is said that the degree of bank concentration is significantly less in the Philadelphia metropolitan area than in many other metropolitan areas in the United States. Thus the three largest banks there held 63.7 percent of deposits, but this gave them only 48th place among 65 standard metropolitan areas. This appears to be advanced as a pro-merger argument, and it is noted that, if the merger had been allowed, the concentration ranking of the largest Philadelphia bank would be only 32nd.[38]

The same argument is made with respect to lending limits of the largest bank. It is said that 20 commercial banks in the United States have lending limits greater than that of any Philadelphia banks.

For want of a better term I might call this the "snowball" argument. If there are 20 banks with higher lending limits, there are thousands with lower lending limits. Should they not be allowed to merge and merge until at least every standard metropolitan area would have an equally high concentration ratio and an equally high lending limit in one or two banks in the area?

In one large-scale New York merger application before the Federal Reserve Board, the applicant argued that the board should not be concerned with the concentration situation because there was an even greater concentration in a number of financial areas outside of New York State. This argument illustrates the great danger in permitting bank mergers of the type involved in the *Philadelphia Bank* case. Each permitted merger is used as a justification for a subsequent merger, and instead of decrying the existence of areas with a very high percentage of control concentrated in a few banks, the existence of such areas is used as an argument to create more of the same.

IV. *Chain Reaction of Bank Mergers*

Two commentators assert that there is "no clear-cut evidence" in support of the court's position that mergers generate mergers within local market areas.[39] What "clear-cut evidence" would convince

[34] *Ibid.*, p. 1320.

[35] *Ibid.*, p. 1320. In the Philadelphia areas as of June 30, 1962, the two largest commercial banks had 36 percent of the deposits of commercial banks in the area. *Ibid.*, p. 1321.

[36] *The National Banking Review*, 1, September 1963, p. 95.

[37] 374 U.S. 321, 331.

[38] Motter, *op cit.*, p. 98. Without the merger the rank was 54th.

[39] Carson and Horvitz, *op cit.*, p. 107.

those commentators, I do not know. It would seem apparent, however, that the bank regulatory agencies have often approved a merger application on the ground it would provide more competition to a large bank competitor whose size had been conspicuously aided by mergers. This premise, as has been noted by the courts, is one which would furnish the basis for a chain reaction of mergers.[40]

In the hearing on the merger application of *First National City Bank of N. Y.* to acquire the *National Bank of Westchester,* there was direct testimony as to how one merger application incites a multitude of other attempts to merge banks.[41]

It is not merely the academician, the interested party, or the veteran antitruster, who has noted the possibility of mergers of this sort triggering a chain of mergers. The banking authorities have acknowledged similar recognition.[42]

Mergers may result in a reduction of competitive opportunities; a multiplication of bank mergers, such as we have seen in recent years, may even reduce the incentive to compete. Thus the letter of a banking executive endorsing a proposed bank holding company ended on this note: "I don't understand and would have to be shown how a small bank could justify declining an offer to join a holding company of what yours appears to be a very good nucleus. I'd like to talk more about it." [43]

[40] *See United States* v. *Bethlehem Steel Corp.*, 168 F. Supp. 576, 618 (S.D.N.Y., 1958).

[41] Transcript of Proceedings, pp. 184-185.

[42] In the Matter of the Application of United California Bank, the Board said that consummation of the proposed merger would "give further impetus to the merger trend in these areas, and thereby tend to discourage the formation of new unit banks." *Federal Reserve Bulletin,* 47, 1961, p. 1407.

[43] Letter in Morgan New York State Bank Corporation Application before Federal Reserve Board.

V. *The Factors of Uniqueness and Expertise*

Another broad argument is that the Federal banking agencies have an expertise in banking matters, that banking is a unique business field, that bank mergers involve economic and management factors which are not limited to antitrust considerations, and all this makes it inadvisable to use antitrust concepts as a standard by which to judge whether a bank merger should be allowed.[44] As a corollary it would seem to follow that those whose experience has been confined to antitrust matters should not be the ones to determine whether a bank merger is good or bad.[45]

It is argued that competition as an economic regulator of the banking industry should have little support since the banking industry is subject to public regulation. It is said that the allocation of the flow of capital is accomplished by applying public standards administered by public authorities, and to apply antitrust concepts of reliance upon private decisions to make these determinations is to create a clash between public and private decision-making.

It is further argued that "bank concentration through mergers is under direct public control." Bank concentration, it is also said, is affected by controls over entry and internal expansion,[46] as well as

[44] Prior to the *Philadelphia Bank* case, the Comptroller of the Currency had said: "It is our responsibility, and our responsibility alone, acting within the statutory policies prescribed by Congress . . . to consider whether proposed mergers of national banks are in the public interest and to decide whether they should or should not be permitted." Decision on Application to Merge *National Bank of Westchester* and *First National City Bank of New York.*

[45] See Motter, *op. cit.*, pp. 99-100; and Abramson, *op. cit.*, pp. 101-103. See also Berle, "Banking Under the Anti-Trust Laws," *Columbia Law Review,* 219, 1949, p. 589.

[46] Abramson, *op cit.*, pp. 101-102. See also Motter, *op. cit.*, pp. 99-100.

other public controls. These are fair sounding arguments, and not without some merit. Upon analysis, however, they do not stand up very well.

The argument of uniqueness is commonly made when members of any industry are charged with violation of the antitrust laws. Thus the response of the motion picture industry to the prod of a government antitrust suit was that, "There is no business like show business." [47] Every industry is unique in that it has certain characteristics which identify it and distinguish it from other industries.

Equally often one finds it asserted that the nature of the industry is such that it does not lend itself to antitrust concepts: the theater, telephone, patent licenses, or foreign arrangements, for example. Yet the application of antitrust principles to such situations has been found to be both feasible and beneficial.

In support of the argument of uniqueness for the banking industry, it is urged that while oligopoly in other industries increases the possibility of overt collusion, rigorous bank examination procedures may nearly eliminate the possibility of overt collusion.[48] It is a fact, however, that it has been the Justice Department which brought to light flagrant antitrust anticompetitive practices among banks supposedly under the supervision of the banking authorities, and the banking authorities seem to have shown less than enthusiastic welcome to such disclosures.[49]

The very fact that banks have been subject to regulation by banking agencies to which antitrust has been a matter of little concern has led some bankers to believe that they had a unique license to violate the antitrust laws.[50]

It may be suggested that a government agency's expertise may not be as high with respect to one aspect of banking as with respect to another. It may be doubted that merger applications have not been reviewed, or reported on, by new staff members of the three Federal regulatory agencies because they were newcomers. Furthermore, whether the desirability of a bank merger is a matter of banking background expertise is certainly debatable. The charge is often made, of course, that a regulatory agency tends to see the public interest in the light of the industry point of view.

In 1961 the Comptroller of the Currency approved 69 merger applications and denied two; in 1962 he approved 110 and denied seven. Between 1962 and

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[47] A few years before the government brought a series of antitrust suits in the motion picture industry which revolutionized the distribution and exhibition of motion pictures, a Note on "The Motion Picture Industry and the Anti-Trust Laws" concluded that those laws "seem not to aid the small exhibitor in his struggle against circuit competition and allegedly oppressive distribution tactics." *Columbia Law Review*, 36, 1936, p. 652.

[48] See Motter, *op. cit.*, p. 96. Cf. Abramson, *op. cit.*, pp. 102-103.

[49] See *Washington Post*, January 4, 1962.

[50] Thus when antitrust suits were brought against a number of Minnesota banks on charges of concertedly fixing rates on loans and deposits, the president of one of the defendant banks asserted to the press: "Power hungry men in the antitrust division of the Justice Department are trying to muscle in on areas legally and traditionally reserved to other departments and agencies of the Federal and state governments." *Wall Street Journal*, February 12, 1963.

An executive of another bank is reported to have said: "The things now being complained about by the Department of Justice have long been known by and acquiesced in by the supervisory agencies." (*American Banker*, February 13, 1963.)

And a third such banker put the matter most baldly when he said: "It has been generally believed that the Sherman Antitrust Act could not be applied to the usual and established practices of the banking community." *Ibid.*

As far back as 1949 the applicability of the antitrust laws to banks had been strongly suggested in an article by Professor Adolph A. Berle, Jr., "Banking Under the Anti-Trust Laws," *op. cit.*, p. 589.

June 30, 1963, he approved 35 and denied one. The Federal Reserve Board's record for the same periods was 32 approved, five denied; 37 approved, five denied; and 18 approved, one denied. The record for the Federal Deposit Insurance Corporation was 31 approved, none denied; 44 approved, none denied; and 14 approved, none denied.[51] The record for prior years is even more uniform in result.[52] It may be that most of these merger applications merited approval, but the record is so one-sided as to raise some doubts as to a system which leads to such results. It seems appropriate, therefore, that the Department of Justice and the courts have some say in the final result.

There is reason to believe that it has been easier to obtain approval from the bank regulatory agencies for mergers than it has been to obtain approval to create a new bank.[53]

It is a fact, however, that the views of the Comptroller of the Currency as to some mergers have not been shared by state banking authorities. Moreover, in a number of instances, where the Comptroller has considered that a proposed merger would not have any substantial anticompetitive effect, the Federal Reserve Board or the Federal Deposit Insurance Corporation has been of a contrary opinion.[54] The Comptroller, in turn, has advised other agencies that proposed mergers would have anticompetitive effects, but those agencies have, nevertheless, approved the merger applications.[55]

Moreover, when the experts have been plural in number even though they have used the same standards, they have differed, at times, as to whether a merger should be allowed. Thus we find, from time to time, dissenting opinions in FRB decisions on merger applications.

The Directors of the Federal Deposit Insurance Corporation disagreed as to the competitive effects of the proposed Crocker-Anglo-Citizens Bank merger. The third Director, the Comptroller of the Currency, did not vote, but as Comptroller of the Currency found no difficulty in disposing of the competitive effects issue.[56]

The opinion in the Crocker-Anglo-Citizens Bank merger contains the following revealing statement.[57]

> The aim of the Bank Merger Act to achieve uniformity through advisory reports on the competitive aspects of bank mergers has obviously failed.
>
> The need for uniformity of approach among the agencies concerned with bank mergers is demonstrated by many manifest inconsistencies in recent years. The Board of Governors of the Federal Reserve System, which objected to the merger of the Philadelphia National Bank with Girard Trust in 1961, had no apparent difficulty in approving the merger of the $831 million Pennsylvania Company for Banking and Trusts with the $228 million First National Bank of Philadelphia in 1955 to form the largest bank in

[51] *Annual Report of the Comptroller of the Currency*, 1962, p. 23; N.Y. State Bankers Association, Planning Ahead for Commercial Banking, 1963, p. 88. Information as to FDIC procured by telephone call to that agency. In July 1963 FDIC disapproved a merger application. It is probable that some prospective mergers have been discouraged upon informal contact with the regulatory agencies.

[52] See Klebaner, "Federal Control of Commercial Bank Mergers," *Indiana Law Journal*, 37, 1962, p. 298, and pp. 299-300.

[53] The more liberal policy of the present holder of the position of the Comptroller of the Currency—a gentleman for whom I have high regard—has been a subject of much comment. Recently, he has announced a go-slower policy. See *New York Times*, 9/22/63, p. 1; *The Wall Street Journal*, 9/26/63.

[54] See *Annual Report of the Comptroller of the Currency*, 1962, p. 23.

[55] See *American Banker*, 9/11/62. As to disagreements regarding other banking matters, see editorial in *The Wall Street Journal*, 9/9/63.

[56] Decision of the Comptroller of the Currency James J. Saxon on the application to merge Crocker-Anglo National Bank, San Francisco, California with Citizens National Bank, Los Angeles, California, Sept. 30, 1963, p. 54.

[57] *Ibid.*, pp. 56, 57.

Philadelphia. Its present concern over concentration in banking was not in evidence when, in 1954, it approved the merger of the $3.4 billion Chemical Corn Exchange Bank with the $859 million New York Trust Company. When the Board approved the union of the $3 billion Guaranty Trust Company with the $969 million J. P. Morgan and Company in 1959 and the merger of the $3.7 billion Manufacturers Trust Company with the $1.95 billion Hanover Bank in 1961, it indicated no fear of concentration of banking resources or of substantial lessening of competition. The same was true when it created the United California Bank.

. . . With the administrative approach to bank mergers in such a state of conflict, it is virtually impossible for a reasonably prudent banker to plan intelligently for future expansion. It is equally difficult for the Comptroller of the Currency to assess these advisory reports of the other agencies in view of their history of past inconsistencies. The question remains as to why the Board of Governors should fear concentration of banking resources in this case, when it was not perturbed by them in the New York mergers in 1954, 1959 and 1961.

In the Philadelphia National Bank proceeding itself the Comptroller's view was that the overall effect on competition would not be unfavorable. But not only did the Antitrust Division of the Department of Justice take a contrary view, both the Federal Reserve Board and the Federal Deposit Insurance Corporation thought the proposed merger would have substantial anticompetitive effects in the Philadelphia metropolitan area.

All this suggests the possibility that the courts and antitrust agencies may not need to take second place to bank "experts" on bank merger matters.

In a court the adversary process goes very far to ensure a thorough airing of the pros and cons of a merger. In bank merger application proceedings conducted by the Federal agencies, hearings are very rare. Reliance is had primarily on the information and argument in the application. The applicant will often beat the bushes to come up with letters favorable to the merger. The man on the street who may have had actual experience as to the value of a number of competing banks is not sought out.

Time and again, in the decisions of the Federal regulatory agencies on merger applications, one finds as the primary reason given for the approval that augmentation of resources and facilities will enable the bank to serve or compete more readily for the business of big companies. Almost never does one find a discussion as to what the merger may mean to the local, less well-heeled, would-be borrower. This is so even where other large banks are already in the area—benefits in such cases seem invariably to be in terms of large borrowers with little or no attention being paid to either the number of small borrowers in the area or to their situations when a small bank goes out of existence.[58]

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[58] In one recent merger case the majority of the Governors of the Federal Reserve Board justified approval on the ground that: ". . . The resulting bank would be able to compete more effectively with the now largest bank in the county and also with the even larger banks in adjoining counties."

In a dissent, Governor Robertson retorted:

"A significant lessening of competition occurs, by definition, where the third and the fourth banks in a developing rural area—their offices only eight miles apart—merge to form a unit equal in size to what is now the largest bank in that area. In my view, under the tests established by Congress in the Merger Act, this lessening of competition, accompanied as it is by the elimination of a sturdy independent bank, requires denial unless overcome by a very positive showing of public benefit under the remaining factors." "Re Sussex County Trust Company," *Federal Reserve Bulletin*, 49, 1963, pp. 788 and 790.

In another dissent, Governor Robertson remarked:

"I am troubled by the assumption implicit in the majority's decision in this case that New York city banks *must* expand into Long Island, even at the expense of an adequately varied banking structure, and equally concerned by

As has been noted, "generally, the Comptroller rules that the resulting bigger bank will be able to provide more liberal loans and be more aggressive than the smaller one merged into it." [59]

From the standpoint of service to the community, a number of competing banks in an area gives the businessmen greater opportunity to receive loans. The businessman turned down by a bank for a loan in an area where alternative sources of banking credit are sparse is hardly likely to be impressed by the argument that the loss of an alternative source has meant increased banking services, such as automation, increased loan capital, and foreign banking services.[60]

In one decision a bank merger between the only two banks in a small town was permitted, it being noted that other banks were nine to 21 miles away.[61] This kind of choice to those who do not drive cars, or have no or few contacts in these other localities, seems to be of dubious value.

VI. *Line of Commerce and Section of the Country*

It is urged that to use branch restrictions as a guide to a meaningful geographic area is improper. It is said that it would be only coincidental for branching considerations to result in an economically relevant area. And the use of a restrictive test as a competitive norm is said to be anomalous.[62] To the writer, on the contrary, it would seem that a geographical restriction protecting a bank from competition would be highly relevant as to whether an area had economic significance. Why the four-county area might not be considered a relevant market area is not stated. The economic relevance of a larger area is ably adduced, but why such area should be considered exclusive or inclusive of the four-county area is not made clear.[63]

Banking authorities often recognize a smaller area as relevant in evaluating the effect of a merger even while recognizing the existence of a larger market area, and in such determinations they have looked at state-imposed geographical limitations.[64]

It is a fact that the Court in its opinion considered other factors—other than branching restrictions—including testimony from bankers, in arriving at the conclusion that the four-county area was a relevant market area.[65]

Mr. Motter, in his comment, considers the question of commercial banking as a relevant line of commerce. While he admits there is an argument in favor of that concept,[66] he seems to favor an evaluation

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the twin assumption that size itself brings better banking services to the public. I do not think this is necessarily true. Bankers in small banks are frequently more responsive to the needs of their neighbors in the community than are the branch managers of large banks whose significant decisions are made under the eye of distant superiors not primarily concerned with the welfare of the particular community." "Re Chemical Bank New York Trust Company," *Federal Reserve Bulletin*, 49, 1963, pp. 785 and 787.

In the proceedings before the Comptroller of the Currency in the First National City Bank of New York-National Bank of Westchester, there were placed into the record affidavits by 21 lending officers of the Franklin National Bank who were formerly with major banks in New York City. According to those affidavits: "These officers, on two occasions, examined a total of 1400 business loans at random which were granted at Franklin National. . . . They concluded that if these same loans had been applied for at their former New York City bank employers, 66 percent or two-thirds of them would have been turned down. . . ." (Tr. p. 150).

[59] *Wall Street Journal*, October 9, 1963, p. 14.

[60] See Klebaner, "Federal Control of Commercial Bank Mergers," *op. cit.*, pp. 287 and 315.

[61] "Re Columbus Junction State Bank," *Annual Report of Board of Governors of the Federal Reserve System*, 1963, p. 171.

[62] Motter, *op. cit.*, p. 95.

[63] *Ibid.*, pp. 94-95.

[64] Cf. N.Y. Banking Board's decision in Bankers Trust-County Trust Bank Holding Company Application, April 13, 1961.

[65] 374 U.S. 321, 334 (1963).

[66] Motter, *op. cit.*, pp. 89 and 94.

in terms of a separate analysis of each of the major products and services. Recognizing the difficulties in such a consideration vis-a-vis non-bank competition, he concludes:

> In the instant case, there may be some usefulness in developing statistics for commercial banking as a whole. However, when this is done, the results must be heavily qualified in the light of the considerations discussed above.[67]

Carson and Horvitz believe the more reasonable approach would be to examine each product line, each bank service, e.g., real estate loans, personal loans.[68] A wide range of cross-elasticities for each product line is suggested.[69]

This sort of approach is no different from the approach by a defendant in the typical merger suit under the Celler-Kefauver Anti-merger amendment to section 7 of the Clayton Act. It is an approach which has been rejected by many economists. It would make merger proceedings unmanageable by requiring all mountains and all molehills to be explored, and by making mountains out of each molehill. The Supreme Court in the *Philadelphia National Bank* case refused to endorse such excursions into each tangential inquiry.

Motter asserts that, "In the Philadelphia case, choice of *any one* section of the country to the exclusion of others, can hardly lead to a realistic picture." [70] Another commentator questions the Court's use of aggregate data for the banking industry as a whole to show concentration. It is argued that such data sheds no light on the concentration existing in individual markets. It is said that data as to the latter comprise the only relevant figures for assessing the competitive effects of concentration.[71]

From the argument that every product line must be considered separately, the result is reached that "a single geographical area cannot be chosen as the relevant market area in which to measure competition." [72] The logic of this thesis cannot be limited to banking. It would apply to almost any industry and to any sizeable company. Thus it could be argued that as to a shoe company the geographical area for each shoe price line, for pedestrians, for car drivers, for public transportation customers, would differ and therefore no single geographical area could be used as a relevant market area. This negative approach was rejected by the Supreme Court in the *Brown Shoe Company* case [73] as well as in the *Philadelphia Bank* case. If I sell 20 items, 15 of which are sold to customers from a certain geographical area, surely it makes economic sense to consider that area as a relevant market.

For the bank as a whole, this 15-item area is a relevant geographical area since an appreciable amount of its business comes from such area and this is all the more so if there are other banks in that area offering similar services. If the bank failed to recognize such an area as having economic significance, it would more than

[67] *Ibid.*, p. 94.

[68] Carson and Horvitz, *op. cit.*, p. 108. Some awareness of the practical difficulties of such an approach is evidenced in another comment. Motter, *op. cit.*, p. 94.

[69] *Ibid.*, pp. 108-109. A recent survey would seem to indicate that commercial banks are more concerned with competition from other commercial banks than from other financial institutions. *American Banker*, 10/7/63, p. 30.

[70] Motter, *op. cit.*, p. 94.

[71] Abramson, *op. cit.*, p. 104. In the Crocker-Anglo-Citizens Bank Opinion location of a bank was said not to have much meaning in determination of a relevant market for depositors because of the number and size of customers, of depositors who deposit by mail, or share correspondent relationships. Opinion, p. 27.

[72] Carson and Horvitz, *op. cit.*, p. 110. The writers do acknowledge, however, that it would be proper to consider the effect of the merger on competition for small business loans in the four-county area.

[73] 370 U.S. 294 (1962).

likely commit economic suicide. It is true that a merger may have effects in a number of areas and beyond any local or regional area.[74] But if an area has economic significance, what may happen to its economic health and structure as the result of the merger has a significance of its own regardless of what its effect may be elsewhere.[75]

The fact that economic areas may not be exclusive of one another is no bar to an appreciation of economic reality. The existence of a secondary retail trading area does not mean that the importance of a primary trading area should be disregarded, or vice versa. Nor should substantial economic consequence in the one area be disregarded because the same merger has less economic consequence in another area.

On the other hand, concern for the consequences of a merger in a local area does not mean that, if there is little cause for such concern there, concern for the larger picture should be absent. It would seem that, if by merger the only ten remaining commercial banks in the country had their home offices in Philadelphia, one might have a legitimate concern over the concentration picture on a nationwide basis whatever the situation might be with respect to Philadelphia.

We hardly think a showing of no effect on some aspects of banking can justify acts which may substantially lessen competition as to banking as a whole or as to certain significant aspects. In my opinion, moreover, a heavy burden rests upon one to show that, in order to promote competition in other aspects of the commercial banking business or with non-commercial bank competitors, it is necessary to substantially lessen competition in some significant aspect of the business of commercial banking.

It is argued that large banks tend to be active on a number of geographical levels. It is pointed out that the competitive effect of a merger between medium or large size banks may have different competitive effects in different markets. Thus a merger might increase competition in one area while reducing it in another. This complication, it is said, was dealt with by Congress in amending the Clayton Act in 1950, in a fashion that seems to ignore rather than resolve the dilemma.[76]

The Celler-Kefauver amendment of 1950, it is submitted, prohibits the probability of a substantial lessening of competition in a relevant market area, through mergers. Congress does not assume, as seemingly do some writers, that added competition in other areas cannot come about except through mergers. Nor does it favor a concept of competition where vigor of competition is equated with the existence of two giants at the expense of the existence of smaller competitors.

VII. *Miscellaneous Arguments*

It is argued that mergers are needed because of state restrictions on branching, or because of the effect of new branches on existing competitors, for example.[77] But a go-slow policy on mergers leads to great pressure to get rid of such restrictions or to modify them—and the right to entry is still in the control of the regulatory agencies.

The Court is taken to task for expounding a philosophy that a significant increase in concentration is likely to lessen competition substantially. This, it is said, espouses an antitrust aim at price competition, which, we are told, does not exist in our present day where "oligopoly is probably the norm."[78] In our present

[74] The Court in the *Philadelphia National Bank* case was well aware of this possibility. 374 U.S. 321, 360-362 (1963).

[75] The Court noted that "the three federal banking agencies regard the area in which banks have their offices as an 'area of effective competition.'" 371 U.S. 361.

[76] Carson and Horvitz, *op. cit.*, p. 107.

[77] Abramson, *op. cit.*, p. 105.

[78] *Ibid.*, pp. 103 and 104.

economy, however, there is still a substantial amount of price competition largely as a result of the existence and the enforcement of the antitrust laws. It may be agreed that oligopoly is not favorable to price competition, but it would seem that the remedy would be not to throw out price competition but to retard the growth of oligopoly through mergers. This was one of the important purposes of the Celler-Kefauver amendment to section 7 of the Clayton Act.

Our attention is called to alleged economies of size,[79] and this seems to be used an an argument against using concentration figures with respect to local markets. It is said that such market orientation along with branching restrictions would make it difficult to have in any number of areas very large banks, and this would produce reliance upon a few large financial centers for certain banking services.[80]

Why there is a need for very large banks in a large number of cities in this country is not made clear. If a keeping-up-with-the-Joneses argument is to be a justification for the demise of smaller banks through merger, it is an argument of singular unattractiveness.

In the absence of more conclusive proof, moreover, it may be doubted that economies of size are appreciably greater for the very large banks than for their moderate size brothers.

VIII. *Conclusion*

When a case reaches the Supreme Court it is quite likely that there are arguments of weight which can be made in support of each side of the central issue. And this is true of the *Philadelphia National Bank* case.

Our bank regulatory system has been a primary factor in the evolution of our admirable banking system. Yet that system in recent years has been subject to much scrutiny, to expressions of concern, and even attack. This has been particularly true as to merger and entry policies.

There is, in my opinion, nothing in the record of the Federal agencies to prove that their approach, under the Bank Merger Act or the Bank Holding Company Act, to bank mergers is superior to the approach of the Supreme Court under the Celler-Kefauver Act. The blend of law and economics of the Court in the Philadelphia bank case is, in my opinion, sound. I would hope that the case may serve as a guide to our banking authorities in merger matters.

[79] We are not clear as to the criteria used for measuring efficiency. Size and profit margins appear to have no definitive relationship. See *American Banker*, 10/7/63, p. 136.

[80] Abramson, *op. cit.*, p. 104.

The Philadelphia National Bank Case: A Reply

► VICTOR ABRAMSON

Mr. Celler attacks the view that banking should be exempt from the antitrust laws because it is a unique business field and is subject to public control by agencies which have an expertise in banking matters. In support of his position, Mr. Celler cites contentions by other industries that they also are unique. As indicative of the importance of applying antitrust concepts to banking, Mr. Celler states that it has been the Justice Department which has brought to light "flagrant antitrust anticompetitive practices" among banks supposedly under the supervision of the banking authorities. He also regards as evidence that the Department of Justice and the courts should have some say on merger approvals the differences among the bank regulatory agencies in their assessment of the competitive effects of proposed mergers, and the rate at which these agencies have approved mergers.

In analyzing these contentions, we must distinguish between the present requirements of law and the continuing issues of public policy. The following comments are directed solely to the issues of public policy.

The fact that a variety of industries have alleged that they are unique is irrelevant to the question whether banking is unique in any meaningful sense in the context of the present issues. The question does not turn on assertions of uniqueness, but rather on the treatment actually accorded an industry under our public policy. Public policy with respect to banking may clearly be distinguished from that applied to the unregulated industries, and the distinctions are relevant to the proper applicability of antitrust concepts to the banking industry. Entry into banking is restricted, bank expansion is controlled, and the competition of banks for the "raw materials" of their operations, the services which they offer, and the prices which they charge for those services, are in greater or less degree publicly regulated or supervised. These basic decisions, which are left largely to private entrepreneurs in the unregulated industries, represent the critically essential means through which the competitive forces are expressed. There is no more fundamental sense in which an industry could be said to be unique with respect to the applicability of the competitive concepts embodied in our antitrust laws.

Mr. Celler asserts that the Department of Justice and the courts should have some say in the final result in bank merger cases. But the issue is not that simple. It is not a question of expertise, as Mr. Celler says, but rather a conceptual question of the standards which should be applied. The difficulties of applying antitrust concepts to banking arise from the

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Mr. Celler's article appears at pp. 229-241 above.

conflicts which are encountered in any effort to shape the banking structure simultaneously both by regulatory and by purely competitive standards. In making decisions concerning new bank charters, new bank branches, and bank mergers, the regulatory agencies inevitably determine the structure of the banking system. The banking structure which they establish by these means sets the competitive conditions which will prevail, and the application of any different competitive standards would obviously be in conflict with these, as our experience has clearly shown.

The evidence which Mr. Celler cites of differences among the regulatory agencies concerning the competitive factors in bank merger cases is equally beside the point. The advisory opinions in bank merger cases are confined to but one of the seven factors which, under the Bank Merger Act, the responsible agency is required to consider in reaching decisions. It should come as no surprise that advisory opinions founded on one factor might differ from responsible judgments reached on seven factors. Nor is the rate of merger approvals, which Mr. Celler cites, a proper basis for the doubts which he expresses about the results of the present system of regulation. Knowledge of the standards applied by the regulatory agencies and the courts in deciding merger cases could reasonably be expected to influence the decisions of banks to apply for mergers.

The overt collusion among bankers, which Mr. Celler asserts, raises questions of an entirely different sort. Any action of this nature, if it occurred, could defeat the purposes of explicit regulation, and should clearly be prevented on that ground. But even if it could be demonstrated that there is a proper antitrust role in preventing collusive banking practices, this fact would carry no implication that there is a comparable antitrust role in the *positive* regulatory task of deciding merger cases, as Mr. Celler seems to say.

Mr. Celler describes as a "snowball" argument the assertion that in deciding merger cases account should be taken of the size of competing banks. Here, again, he mistakes the issue. The proper question is not whether there may be larger banks in existence, but whether the public interest may best be served by creating, through merger, additional banking institutions of larger size. It should be obvious that the application of this criterion is limited, and carries no implication that all banks should be allowed to grow to the size of the largest. The "chain reaction," which Mr. Celler fears, is certainly not automatic, but is within the control of the regulatory agencies.

Nor is it true, as Mr. Celler appears to believe, that decisions with respect to the public need for larger banking institutions are made without consideration of the effects upon the services available to all classes of consumers of banking services, large or small. The size of a banking institution is not in every respect related to the size of its customers. Moreover, we must understand that some consumers of banking services do require the facilities available only from the larger banking institutions, and there can be no proper reason for withholding these benefits from that segment of the consuming public. If, as a result of the formation of additional larger banks to serve some banking markets, deficiencies appear in other banking markets, the regulatory authorities can remedy this by permitting additional competition in those other markets through the formation of new banks or new branches. It is not sensible to assume that the total volume of banking facilities need be held constant, in determining how to meet consumer needs for banking services.

Mr. Celler also misconstrues the argument advanced with respect to oligopoly. The issue is not whether to "throw out price competition," as he says, but whether the degree and form of competition we seek to attain in banking should

be one in which no oligopolistic elements are allowed to prevail. If Mr. Celler's views were accepted, we would have to forsake many of the public advantages of large-scale enterprise. In terms of the broad public interest, it would seem that the proper goal would be to seek these advantages wherever they produced lower prices or better service to consumers. The mere fact that oligopoly prevails is no test of the achievement of this objective. Nor do the voluminous data on bank concentration cited by Mr. Celler, standing alone, furnish any clear evidence of the outcome of bank competition according to this basic criterion.

Foreign Branches and Edge Act Corporations

► RONALD E. COVAULT

The "international outlook," which now enjoys unprecedented currency, has profoundly affected American trade and investment practices. A significant element in the chemistry of accelerated foreign trade and investment is the complement of associated services and credits made available by the commercial banks of this nation.

These same commercial banks are constituents of a regulated industry, and, as such, a large measure of their corporate vitality depends upon the way in which regulatory power is administered. This embraces, of course, the regulation of the international operations of American banks. Two significant changes affecting these international operations were recently announced by the Board of Governors of the Federal Reserve System. One deals with foreign branches; the other with Edge Act corporations.

I. *Regulation M*

The first of these, revised Regulation M, 12 CFR 213, effective August 1, 1963, speaks directly to foreign branches of national banks, but will, in addition, have collateral effects on certain powers of foreign branches of state banks which are members of the Federal Reserve System. The revised Regulation M has been issued as a result of the passage of Public Law 87-588 (12 U.S.C. 604a) "to improve the usefulness of national bank branches in foreign countries." The statute authorizes the Board of Governors of the Federal Reserve System, by regulation, to permit foreign branches of national banks "to exercise such further powers as may be usual in connection with the transaction of the business of banking in the places where such foreign branches shall transact business."

Some attention must be given at the outset to the competitive posture of foreign branches of national banks prior to the passage of Public Law 87-588. In general, they were subject to statute law and regulatory policies designed for domestic banking institutions and for competition in this country. This regulatory scheme was superimposed on banking and other corporate laws of the country where the branch operated, thus resulting in a dual system of regulation.

Witnesses at the Senate and House Hearings on the bill were of one accord; that, as a result of prevailing domestic restrictions, national bank foreign branches were unable to engage in many commercial banking practices common to the countries where they were located. Cited as simply illustrative of the areas in which these branches were unable to respond to local practices, to their disadvantage, were the following: acceptances financing; real estate loans; bank guarantees; purchase of public securities; and transactions in otherwise qualified securities under repurchase agreements. The problems which foreign branches of

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national banks so frequently encountered were recognized by the Federal Reserve Board in its official comment to a subcommittee of the House Committee on Banking and Currency in the 87th Congress:

> Business methods and operating conditions in foreign countries often differ considerably from those in this country, and banks in foreign countries are often subject to few if any of the rules that apply to national banks in this country. It is apparent that in this situation American banks may often find their effectiveness materially handicapped. (Hearings on S. 1771 Before the House Committee on Banking and Currency, 87th Cong., 1st and 2nd sess. 32-33 (1962))

As was the case when an identical provision passed the Senate as part of the Financial Institutions Act of 1957, Public Law 87-588 was a non-controversial bill. The banking industry, the Board, the Comptroller of the Currency, and all others who testified on the bill were unanimous upon the proposition that it was a desirable objective to provide the foreign branches of our national banks with whatever additional powers might be necessary to enable them to compete more effectively under the laws of the countries where they were doing business. The only restrictions imposed by the statute upon any additional powers provided by regulation related to (1) underwriting, selling, or distributing securities; and (2) manufacturing or dealing in goods, wares, and commodities.

Many of the affected banks had anticipated that the legislation would lead to a comprehensive realignment of powers that would grant them the full range of banking authority usual where they transacted business. The Federal Reserve Board, however, took a narrower approach to the legislative intendment. The substance of the revised Regulation M was presaged by the following remarks of Chairman Martin in testimony before the House subcommittee considering the bill:

> . . . I would not interpret this bill as a *carte blanche* for the full equalization of foreign branch powers with those of foreign banks. Apart from the fundamental limitations in the bill itself, it would not allow foreign branches to exercise any additional powers except as expressly permitted by Board regulations that would be formulated after consideration of actual conditions and with due regard for the integrity and soundness of the American banking system. (Hearings on S. 1771 Before the House Committee on Banking and Currency, 87th Cong., 1st and 2nd Sess. 33 (1962))

As promulgated by the Federal Reserve Board, the revised Regulation M is confined to authorizations to engage in a limited number of practices, some of which are themselves carefully circumscribed. In brief, the powers provided, so far as they are usual in the banking business of the foreign location, are as follows:

1. To issue guarantees and similar agreements, subject to stated amount limitations.

2. To accept drafts or bills of exchange, subject to the usual amount limitations of the Board's Regulation C.

3. To invest in the securities of the central bank, clearing houses, governmental entities, and development banks of the country in which the branch is located; subject generally to an amount limitation of one percent of a branch's total deposits.

4. To underwrite and deal in obligations of the national government of the country in which the branch is located, subject to stated amount limitations.

5. To take liens on foreign real estate in connection with extensions of credit without complying with certain requirements of section 24 of the Federal Reserve Act (12 U.S.C. 371).

6. To make loans to executive officers of the branch for the purpose of acquiring residences abroad, if such loans do not exceed $20,000 for any officer.

7. The revision also simplifies the procedure under which national banks may establish foreign branches, by providing that, if a national bank has established a branch in a foreign country with Board approval, it may establish additional branches in that country after thirty days' notice to the Board with respect to each such branch.

These powers may be contrasted with those permitted to foreign branches of state banks. So far as can be ascertained, the only state banks operating overseas branches are those chartered under the laws of New York. Section 96.10 of the Banking Laws of that state permits foreign branches to exercise, in addition to those powers permitted to domestic offices, such further powers as are usual in the business of banking in the foreign country. This authorization arises by force of this statutory provision, rather than by regulation. Provision is made for regulation by the New York banking authorities, but this power has not been exercised in the six years that the statute has been in effect. One important exception to this spectrum of powers is based upon the provisions of 12 U.S.C. 335. That statute pertains to dealings in investment securities and stock, and serves to relate the securities acquisition and underwriting powers of foreign branches of state banks which are members of the Federal Reserve System to the comparable powers of national banks, as enlarged by Regulation M.

The *guarantee provision* of the revised Regulation M represents an advance beyond the more restricted guarantee powers of domestic institutions. Guarantees are employed by foreign banks to accomplish such diverse ends as the coverage of rental payments under a lease, insuring payment of shipping charges, insuring the proper use of foreign exchange by tourists, and securing the release of merchandise in the absence of required shipping documents. Under the new Regulation M, a national bank foreign branch may now guarantee customers' debts, or otherwise agree to make payment on a customer's behalf on the occurrence of readily ascertainable events. The aggregate outstanding guarantee liability (less any security) is limited by the Regulation to 50 percent of the bank's capital and surplus. In addition, there is a limitation on the amount (less any security) of guarantees which may be outstanding for the benefit of an individual customer, which has the effect of including guarantees issued under the Regulation within the lending limits of 12 U.S.C. 84 (10 percent of capital and surplus to any one borrower).

The limitations on aggregate outstanding guarantees under the revised Regulation M represent an approach dissimilar to that embodied in a ruling of the Comptroller of the Currency (Para. 7000 of the Comptroller's Manual). That ruling provides that the guarantee liability of a national bank on notes or obligations sold for its own account is includable in the aggregate indebtedness of a national bank. That aggregate indebtedness is limited by statute (12 U.S.C. 82) to the amount of the bank's capital stock plus 50 percent of its unimpaired surplus. Thus, through regulation M, a special limitation, more restrictive than that provided by the aforementioned statute, is made applicable to guarantees issued by a foreign branch of a national bank.

There is a dissimilarity also in the treatment of guarantees allowed to be outstanding for the benefit of an individual customer. The Comptroller of the Currency has ruled that commitments to lend to a customer or to make payment for its account (which would encompass guarantees of the type under discussion) do not result in "obligations" subject to the lending limit, until such time as the bank is required to make the advance or payment, and then only to the extent of the required advance. Regulation M, however, would render guarantee agreements subject to the lending

limits of 12 U.S.C. 84 at the *inception* of the agreement. Thus, guarantees issued by foreign branches of national banks would, under Regulation M, be more restricted in this respect than would the domestic guarantees of those banks.

The *acceptance provision* warrants special attention. Acceptances issued by U. S. banks are prime instruments in financing international trade, and are presently outstanding in amounts approaching $2.75 billion. Total outstanding acceptances of U. S. banks have more than doubled in the past four years, indicating that this vehicle is one of increasing importance. Additionally, acceptances are widely employed in foreign banking markets to cover the inland shipment of goods and are integral to extensions of credit through the medium of "finance bills." Under the terms of the revised Regulation M, the acceptance of bills or drafts is no longer tied to those underlying transactions elicited in paragraph (a) of Regulation C, 12 CFR 203; nor are the maturity limitations of paragraph (b) of Regulation C applicable. Thus, the acceptance of drafts or bills is now permitted so far as usual in connection with the transaction of the business of banking in the place where the foreign branch is located. The limitations of paragraphs (c), (d) and (e) of Regulation C (relating to amounts which may be outstanding) are, however, applicable.

The acceptance provision of the revised Regulation M corresponds with a recent ruling by the Comptroller of the Currency. The Comptroller has ruled that national banks are not limited in the character of acceptances which they may make, since the making of acceptances is essential to the business of banking and as such is authorized by the Seventh Paragraph of 12 U.S.C. 24. That ruling is, in turn, comparable to a long-established position of the Federal Reserve Board that state member banks are not delimited by Federal law in the character of acceptances which they may make. Further, while not explicitly so stated in the Comptroller's ruling, the maturity limitations of the statute and of Regulation C are held not to be binding on national banks. The Comptroller's ruling, however, does allow that national banks are subject to the limitations of 12 U.S.C. 372 and Regulation C pertaining to the amount of acceptances which may be outstanding. The distillate of the Comptroller's ruling is, then, that domestic offices of national banks may issue acceptances without restriction as to character or maturity. The revised Regulation M would restate, as a special grant, a power already enjoyed by national banks. The grant under the Regulation may be read as modifying the effect of the Comptroller's ruling by permitting the exercise of the acceptance power only insofar as usual in the business of banking where the foreign branch is located.

The *provision relating to the acquisition of securities of indigenous central banks*, clearing houses, development banks and similar institutions is an advance over former powers in this respect. The revised Regulation M provides that such acquisition is proper only where the total holding of securities by the branch will not exceed one percent of branch deposits. In calculating "total holdings of securities," securities which are held as required by the law of the host country, or as authorized under the "investment securities" provision of 12 U.S.C. 24, are excluded. Rather than permitting such acquisition "so far as usual," the Federal Reserve Board has established a further limitation of one percent of branch deposits.

A significant provision of the revised Regulation M is the grant of permission to foreign branches to *underwrite, distribute, buy and sell obligations of the National Government* of the foreign country, so far as usual in the banking business there. The Regulation provides an aggregate-amount limitation on the

holding of such securities of 10 percent of the bank's capital and surplus. This measure will allow foreign branches to take an active role in financing public works and other economic development projects of foreign states. In addition, the provision represents a major step toward permitting foreign branches to compete locally as full service institutions.

The provision of the revised Regulation M which allows foreign branches of national banks to take *liens on real estate of less than first priority*, and on other than approved or appraised property, improves their competitive position. Under current law, a loan by a national bank secured by real estate must comply with the provisions of 12 U.S.C. 371 only where the bank relies on such real estate as the primary security for the loan. Where the bank, in its judgment, relies principally upon other factors, such as the general credit standing of the borrower, guarantees, or security other than real estate, a loan does not constitute a real estate loan within the meaning of 12 U.S.C. 371, although as a matter of prudent banking practice it may also be secured by real estate.

Competitively, the problems raised in this connection are particularly acute in Latin America, where the fruits of a successful business operation are often invested in real estate rather than securities. Thus, a branch of a national bank seeking to extend substantial credits to accommodate the Latin American entrepreneur may often be confined to collateral in the form of encumbrances on real estate. In those circumstances, where a bank is relying primarily on the security of real estate, a real estate loan may now be made against security other than as required in 12 U.S.C. 371. Where, however, reliance is placed principally on other credit factors, which is more typically the case with commercial loans, the provision of Regulation M would do no more than restate, as a limitation, that which has already been deemed permissible for national banks as a prudent banking practice. The limiting effect of this provision develops from the postulate that this activity may be engaged in only so far as is usual in the banking business in the foreign country.

The provision of the revised Regulation M which allows the *extension of certain credits to executive officers* of the foreign branch should permit broader latitude in the branches' quest for qualified personnel. The Regulation allows a foreign branch to extend credit to its executive officers in an amount not to exceed $20,000, to finance the acquisition or construction of a residence abroad. Each such credit must be promptly reported to the home office of the bank. Domestic offices of national banks are subject in this respect to 12 U.S.C. 375a, which sets a maximum limit of $2500 on loans to executive officers, and requires that all such loans be approved by a majority of the entire board of directors.

Finally, the revision has altered the *procedures for the establishment of foreign branches.* Regulation M now provides that where a national bank has established a branch in a foreign country, it may, unless otherwise advised by the Federal Reserve Board, establish other branches in that country after 30 days notice to the Board with respect to each such branch. Formerly, the establishment of every foreign branch required the prior approval of the Federal Reserve Board.

Conclusion. The revised Regulation M will not permit national banks to compete with foreign banks on a fully equal basis. Nor will the revised Regulation permit national banks to compete on an equal basis with their domestic banking competitors. The disadvantage at the foreign location relates to the capacity to compete for accounts originating there; the disadvantage at home relates to the capacity to compete for domestic accounts that require extensive overseas banking services.

II. *Regulation K*

Regulation K, 12 CFR 211, effective September 1, 1963, was issued by the Federal Reserve Board under the authority of Sections 25 and 25(a) of the Federal Reserve Act (12 U.S.C. 601 et seq.), the latter section being more commonly known as the "Edge Act." Taken together, these sections of the Federal Reserve Act permit both investment in and establishment of corporations to engage in international banking and financing. Edge Act corporations are federally chartered pursuant to Section 25(a), and are directly responsive to Regulation K. "Agreement" corporations are those banking corporations, chartered generally under state law, which agree to submit to Federal Reserve Board regulation in order to maintain eligibility under Section 25 as a proper investment for national and state member banks. "Agreement" corporations must comply with the provisions of Regulation K pertaining to corporations engaged in banking. The revised Regulation K will affect virtually the entire domestic bank employment of international banking or financing subsidiaries.

The Edge Act itself covers corporate activities and powers ranging from articles of association, organization certificates and banking powers, to insolvency and tax treatment. Maximum amount limitations on investments in other corporations, and on liabilities arising from the issuance of debentures, bonds, and promissory notes are among other particulars given attention in the act.

Regulation K expands on these and other provisions of the Edge Act. The following is a brief analysis of the major revisions accomplished by the recently revised regulation.

The *definitional provisions* of the revised Regulation K effect important innovations. Regulation K had formerly defined "banking" as "the business of receiving or paying out deposits, or accepting drafts or bills of exchange." A Banking Corporation was described as "a Corporation which is engaged in banking," and a Financing Corporation as "a Corporation which is not engaged in banking except to the extent that it is required by the Secretary of the Treasury to act as fiscal agent of the United States." The distinctions established by these definitions were employed in sanctioning particular activities. Thus, a Banking Corporation was not allowed under the former Regulation K to issue bonds, debentures, promissory notes of more than one year maturity, or other similar obligations. In addition, a Banking Corporation was not permitted to underwrite securities, except with the express permission of the Federal Reserve Board as to certain obligations of foreign national governments. Financing Corporations were, in contrast, prohibited from engaging in banking, except as required by the Secretary of the Treasury, but were permitted broad powers in underwriting and dealing in securities.

Further, the former regulation ordinarily permitted a Banking Corporation to acquire only stock of corporations engaged in banking or closely related activities. Conversely, a Financing Corporation was ordinarily denied the right to invest in corporations engaged in banking. Limitations on the liabilities of one borrower were differently assigned for Banking and Financing Corporations, with the result that the limitation for a Banking Corporation was 10 percent of capital and surplus, and for a Financing Corporation 50 percent of capital and surplus.

This definitional distinction translated immediately into practice. Major bank participants in international banking and finance maintained two subsidiaries: one a Banking Corporation, and the other a Financing Corporation.

The revised Regulation K defines a Corporation "engaged in banking" as follows: "A Corporation is 'engaged in bank-

ing' whenever it has aggregate demand deposits and acceptance liabilities exceeding its capital and surplus." This distinction is applied in restricting securities underwriting and distribution activities of Corporations engaged in banking, and in reassigning the distinct limitations on liabilities of one borrower for Corporations engaged in banking and those not so engaged. One effect of this partial integration of banking and financing activities will be to allow former Financing Corporations, upon appropriate charter amendment, to engage in banking within the limitations provided by the definition, in order to facilitate the financing of customer needs and to provide a more complete portfolio of financial assistance. In addition, consideration may be given to the merger of Banking and Financing Corporations under the revised Regulation.

A second major provision of the revised Regulation K is that treating of the *issuance of corporate obligations*. Under the former Regulation K, a Banking Corporation was not allowed to issue its own obligations. A Financing Corporation was permitted to do so, and was not required to secure the prior approval of the Federal Reserve Board. That earlier Regulation proceeded to describe the requirements for trusteeship of collateral on secured issues, and to prohibit certain transfers by the Corporation while unsecured obligations were outstanding. In addition, the former regulation was replete with detailed rules as to prospectuses and other documentation in connection with the issuance of corporate obligations. The new Regulation K makes a major modification in this respect, in that every issue of corporate obligations must now have the prior approval of the Federal Reserve Board.

Underwriting powers are covered in a third major provision of Regulation K. Banking Corporations, under the former Regulation K, were not permitted to underwrite, sell, or distribute securities, except as, on prior application, the Federal Reserve Board should exempt branches of these Corporations with respect to obligations of, or unconditionally guaranteed by, the national government of the place where the branch was located. Financing Corporations were subject to no general restrictions on the right to underwrite and deal in securities, except as to such activities in the United States.

The revised regulation allows that a Corporation engaged in banking, in addition to dealing in securities of the national government where its branches or agencies are located, may deal in securities to the extent permissible for national banks under 12 U.S.C. 24. The revised regulation makes no significant change as to underwriting, sale, and distribution of securities within the United States, and reenacts the former proscription on such activities as trustee, and registrar, with respect to securities distributed in the United States. These changes will permit Corporations engaged in banking and operating overseas branches to compete more effectively and to take a more active role in financing foreign public debt.

At present, it appears that there are five overseas branches of corporations which were Banking Corporations under the former Regulation K. Four of these branches are those of a national bank located in the Virgin Islands, which operates as a subsidiary of a domestic state member bank.

The provisions of the former Regulation K concerning *operations in the United States* were marked by a general policy statement complemented by a listing of activities considered permissible and rules applicable thereto. The former Regulation K had stated as its general policy, the injunction of Section 25(a) of the Federal Reserve Act that a Corporation shall not carry on any part of its business in the United States except as shall be incidental to its international or foreign business. The general policy

under the revised Regulation K is to the effect that Corporations are permitted to transact "such limited business in the United States as is usual in financing international commerce."

Turning to specific instances of activities in the United States, the revised Regulation K treats of the *employment of funds* of a Corporation not currently utilized in its international or foreign business. Regulation K had formerly provided that such funds may be held or invested in the United States in the form of (1) cash, (2) deposits with banks, (3) bankers acceptances or prime open market commercial paper, and (4) direct obligations of the United States or investment securities as sanctioned under 12 U.S.C. 24. The revised regulation has eliminated prime open market commercial paper and domestic "investment securities," but now permits investment in obligations of, or guaranteed by, the United States or an agency thereof.

The second particular activity in the United States covered by the revision is the *receipt of deposits*. The revised Regulation K retains the prohibition on accepting savings deposits. It also restates the former provision that demand and time deposits shall be subject to Regulation D (12 CFR 204) relating to reserves of member banks, and to Regulation Q (12 CFR 217) relating to the payment of interest on deposits.

The portion of the revised Regulation K dealing with limited operations in the United States concludes with coverage of a miscellany of permissible activities, among the more important of which is the *issuance of guarantees*. This power has been appreciably expanded to correspond to a similar advance under the recent revision of Regulation M, and permits a Corporation to guarantee customer's debts, or otherwise to agree to make payments on the occurrence of readily ascertainable events. Sanction is also given under the revision to the acquisition of subsequent participations in credits which are related to transactions the Corporations could have financed at inception.

Under the former Regulation K, *investment in the stock of other corporations* required in every instance the prior approval of the Federal Reserve Board. This was accomplished either through a letter of general consent to the investment program of a particular Corporation, or through specific authorization on a transaction basis. The revision of Regulation K has evolved a significant modification of the former provision. Thus, the Federal Reserve Board has established a general consent for all Corporations to investment in the stock of corporations organized under foreign law, if such acquisition (1) is incidental to an extension of credit by the Corporation to the corporation whose stock is acquired, (2) consists of stock of a foreign bank, or (3) is otherwise likely to further the development of United States foreign commerce. No acquisition under this authorization may lawfully cause a Corporation to hold 25 percent or more of the voting shares (exclusive of rights to acquire shares) of a foreign bank, and the aggregate investment in the shares of any other corporation under clause (3) of this provision may not exceed $200,000 or its equivalent. The revised Regulation K provides for advisory opinions of the Federal Reserve Board as to whether a particular acquisition is covered by the foregoing provision. Prior specific consent is required in those instances where a proposed acquisition is not covered by the foregoing general consent.

Conclusion. The limitations imposed under Regulation K, as distinct from the statutory requirements of the Edge Act, have been attributed to the unsuccessful experience of early Edge Act Corporations. Although the performance record of present-day Edge Act Corporations appears to be satisfactory, the revision of Regulation K, nonetheless, has made only selected changes within the regulatory framework.

A Note on the Quality of Credit

► STANLEY SILVERBERG

In recent months there has been extensive discussion about the quality of credit and the quality of bank asset portfolios. These discussions have occurred in Congressional testimony, in the popular financial press, and in academic writings which have been in process for several years.[1] The purpose of this note is to examine briefly the concept of the quality of credit and its relationship to monetary policy and economic policy goals generally.

I. *Meaning of Credit Quality*

The "quality" of credit generally refers to the likelihood that present debtors will meet their obligations, or that currently extended credit will be liquidated according to agreed terms.[2] This is not a readily measurable concept. Over any period of time we can compute delinquency or default rates, say, as a percentage of outstanding indebtedness. But this would be a reflection of performance on credit extended over varying periods in the past. Also, we would expect results to be strongly influenced by current economic conditions. In periods when unemployment is low and business cash flow is relatively high, borrowers are more likely to be able to meet previously-incurred obligations. Thus, it might be said that any judgment on the quality of a particular loan or loan category, or the quality of credit generally, implies at least some judgment on the future performance of the economy as a whole.

It *is* possible, at least in principle, to isolate the quality of credit from fluctuations in the overall level of economic activity. Suppose that, for any point in time, we could estimate loan default rates or loan loss rates that would accompany varying levels of resource utilization. As, for example, the level of unemployment rose, the level of loan losses presumably would rise, given some "state of credit quality." Changes in the quality of credit would be reflected in shifts in the relationship between loan losses and the level

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[1] A. M. Wojnilower, *The Quality of Bank Loans*, National Bureau of Economic Research, New York, 1962; *Recent Changes in Monetary Policy and Balance-of-Payments Problems*, Hearings before the Committee on Banking and Currency of the House of Representatives, 88th Congress, 1st Session, July 22-26, 1963, pp. 85-86; "Quality of Credit Deteriorating, Claims Insurance Company Head," Speech by J. J. Magovern reprinted in *Barron's*, October 21, 1963, pp. 8, 15-16, 25; "The Quality of Credit —Is It Strained?" *Business Review*, Federal Reserve Bank of Philadelphia, August 1963, pp. 3-7; H. Bratter, "Is the Quality of Credit Deteriorating?" *Banking*, November 1963, pp. 55-58; J. S. Earley, "The Quality of Credit in Residential Financing," *Conference on Savings and Residential Financing*, U. S. Savings and Loan League, Chicago, 1963, pp. 126-140; Wm. McC. Martin, Jr., Statement before the Committee on Banking and Currency, September 24, 1963, reprinted in *Federal Reserve Bulletin*, October 1963, pp. 1371-1379; *The Uses of Economic Research*, Forty-third Annual Report of the National Bureau of Economic Research, 1963, pp. 10-17.

[2] For a detailed discussion of alternative definitions and characteristics of the quality of credit, see G. H. Moore, "The Quality of Credit in Booms and Depressions," *Journal of Finance*, May 1956, pp. 288-300.

of resource utilization. Credit quality "deterioration" would imply that the loan loss rate would be higher for any given level of resource utilization—an upward shift in the curve plotting hypothetical losses against various levels of unemployment.

The quality of credit or the hypothetical schedule reflecting it will be influenced by such factors as lender and potential borrower attitudes toward risk, various restrictions imposed by regulatory authorities, and competition in financial markets. Monetary policy and recent economic exeprience are apt to be especially important factors influencing the quality of credit, and their relationship to the quality of credit will be considered first.

II. *Monetary Policy and Credit Quality*

It has been argued by bankers, central bankers, and economists that the effectiveness of monetary policy depends heavily upon variations in credit availability, rather than upon the interest elasticity of loan demand of potential borrowers.[3] During periods of monetary restriction, it is argued that banks tend to be more selective in their lending policies at the expense of borrowers with weaker financial positions. Conversely, in periods of relaxed monetary policy, banks are likely to pursue loans more aggressively and to relax their credit standards. Thus, while interest rates on bank loans may appear very sluggish in response to changes in economic activity and monetary policy, credit availability to "marginal" borrowers may fluctuate significantly.

Several alternative explanations for bank lending policies can be offered. In some instances, ceilings on interest rates that banks may charge limit the ability of banks to price loans at levels that will clear the market. Even where interest rate ceilings do not legally limit bank policy, bankers may be sensitive to public criticism about "usurious" charges, and consequently may be hesitant to charge more than 6, or 7, or 8 percent on loans. Traditions, including possibly that of few price changes, also may act to limit any increases in interest rates.

Hodgman has offered an explanation of bank credit rationing that relies heavily on the long-run deposit relationship between banks and their long-standing commercial customers.[4] He argues that the profitability of a bank's relationship with a commercial customer is calculated over a period of several years, and is importantly influenced by the size of the customer's demand deposit balances. In periods of monetary restriction, banks attempt to meet the loan demand of commercial customers who have maintained substantial demand balances in the past and are likely to do so in the future. As a result, a new potential borrower, or one who has not or is not likely to maintain a large demand balance is not able to bid away limited bank loan resources by offering a somewhat higher rate of interest on borrowed funds. Hodgman's explanation, while not altogether convincing as a complete explanation for credit rationing, is consistent with views expressed by bankers and with observed behavior, and probably does account for some degree of credit rationing. If the customer-deposit relationship does explain credit rationing, then the favored borrowers are likely to be those with strong financial positions and favorable financial histories. Credit rationing, thus, can be expected to result in an *upgrading*

[3] *The Report of the Commission on Money and Credit,* Prentice-Hall, 1961, pp. 47-49; *Recent Changes in Monetary Policy, op. cit.;* J. Kareken, "Lenders Preferences, Credit Rationing and the Effectiveness of Monetary Policy," *Review of Economics and Statistics,* August 1957, pp. 292-302.

[4] *Commercial Bank Loan and Investment Policy,* Bureau of Economic and Business Research, University of Illinois, 1963, pp. 97-112, and 146-153.

in the quality of bank loan portfolios. It should be pointed out, however, that if Hodgman's explanation of credit rationing is correct, then it depends upon the prohibition of interest payments on demand deposits. If banks paid explicitly for profitable demand accounts, then, presumably, there would be no basis for favored loan treatment of customers who had maintained large demand accounts. Also, insofar as business firms economized on cash balances, as they have in recent years by shifting demand balances to time accounts and marketable securities, there would be less basis for credit rationing by banks.

An alternative explanation for credit rationing depends upon bank attitudes toward risk and return. Bankers through their training, tradition and contacts with regulatory authorities have learned to place great importance upon liquidity and safety; but banks are profit-making institutions and their liquidity and safety inclinations tend to conflict with the motivation of increasing or maximizing earnings. Consequently, we might expect bankers to behave as risk averters in their portfolio decisions; that is, given two alternatives affording the same expected return, bankers will choose the alternative involving less risk. Also, presumably, there may exist alternatives involving a lower return and less risk that might be considered preferable to alternatives involving greater expected return and greater risk.

In periods of buoyant loan demand, as banks move toward a heavily "loaned-up" position, their asset portfolios are altered toward a high-return, high-risk position. At such times the banker's trade-off between risk and return is likely to require larger increments of return to compensate for successive increments of risk. This suggests that when banks are heavily loaned they are likely to place much more importance on quality than on additional return. As a result, when the rationing of loans is necessary, banks may tend to raise quality standards rather than interest rates. In periods when loan demand is relatively weak, bankers may consider themselves under pressure to maintain previous or "satisfactory" earnings levels—the risk-return trade off is likely to tolerate greater increments of risk to achieve small increments of additional return.

This approach, to be wholly satisfactory as an explanation for credit rationing, requires some inflexibility on the part of bankers, whether this takes the form of an unwillingness to consider very high interest rates or a distaste for losses that transcends rational earnings calculations. A banker might be able to attain the same combination of risk and return by making fewer loans of lower quality, affording higher interest rates. But this would not be consistent with the view or observation that credit rationing involves an upgrading of bank loan portfolios.

If monetary policy's effectiveness depends heavily upon variations in the willingness of bankers to make riskier loans, then presumably monetary policy works largely through changes in the "quality of credit." In periods of monetary ease, when banks have ample liquidity and interest rates tend to be relatively low, the active pursuit of loans might be expected to lead to some apparent decline in the quality of bank loans—other things being equal. In a similar manner, we might expect other financial institutions to respond to variations in credit demands by varying their quality standards, particularly where they are in direct competition with commercial banks.

III. *Cyclical Behavior of Credit Quality*

Loans extended in periods of buoyant economic activity may tend to be of lower quality than loans extended during periods of depressed economic activity. In

buoyant periods, current performance of potential borrowers may reflect abnormally favorable conditions, and forecasts based upon such conditions may afford an exaggerated picture of the earning and loan-servicing capacity of potential borrowers. Conversely, performance figures in periods of depressed economic activity and forecasts based upon such figures may present an unduly pessimistic picture; and, consequently, loans made during periods of depressed economic activity will tend to be of relatively high quality.

For the most part, periods of buoyant economic activity have accompanied monetary retraint, whereas periods of depressed activity have been accompanied by monetary ease. Thus, there tend to be offsetting forces affecting the quality of credit throughout the business cycle. This tends to blur the picture, and it is not always clear whether credit standards are really easier in periods of easy money and depressed economic activity than in periods of tight monetary policy and buoyant economic activity. The present cyclical upswing has not been accompanied by restrictive monetary policy: at least it has not been restrictive compared with the three preceding cycles. Consequently, lenders have not been under pressure to upgrade the quality of loan portfolios. On the other hand, many will argue that the gradual nature of the present upswing has diminished the likelihood of exaggerating borrowers' prospects.

Apart from the effect of cyclical fluctuations on the apparent prospects of borrowers, lenders seem to be influenced by cyclical fluctuations, particularly where the fluctuations have a significant effect on loan default rates. Extended periods of relatively favorable economic performance and low loan losses tend to influence lenders in the direction of easing credit standards. Many argue that the favorable loan performance since the end of World War II has led to a kind of euphoria among bankers and other lenders. On the other hand, during the mid-1930's, loans were very hard to obtain since lenders were strongly influenced by the heavy losses incurred during the early 1930's.[5] Such behavior on the part of lenders is not irrational. We have already suggested that credit quality might be conceived as a schedule of losses that might accompany varying levels of economic activity. Extended periods of high economic activity naturally will diminish the relevance to lenders of that portion of the hypothetical schedule that corresponds to, say, 10 or 20 percent unemployment rates.

IV. *Other Determinants of the Quality of Credit*

Attitudes of lenders and potential borrowers, competition among lenders, and legislative restrictions are among the many other factors influencing credit quality. In recent years substantial changes have occurred in attitudes and institutions affecting lending. Many of these changes have tended to liberalize credit standards and lending practices. Legislative changes have liberalized maximum terms on VA and FHA mortgages and allowed financial institutions to offer more liberal terms on conventional mortgages. The willingness of banks and other financial institutions to offer a variety of credit instruments has changed substantially. The result has been more competition and more liberal terms available in financial markets, particularly for instalment credit, construction loans, and mortgages. Competition

[5] D. S. Thompson ("Changes in Quality of Bank Credit," *Journal of Finance*, May 1956) points out that while bankers may not become infected with optimism easily in periods of prosperity, historical evidence lends substantial support to the obverse: that following periods of substantial losses bankers tend to raise credit standards and become extremely conservative in their lending policies.

among lenders has forced them into "riskier" loans and investments, and in many instances has forced financial institutions to behave more aggressively in order merely to hold their share of the market and their rates of return on invested capital.

Bank competition for time deposits in recent years affords an interesting example. Following the modification of Regulation Q in December 1961, most banks raised their rates on time deposits. This, and to a lesser extent the offering of negotiable certificates of deposits (beginning in 1961) by many banks, has led to a substantial increase in the volume of bank time deposits during the past two years. Many banks have found themselves under pressure to maintain earnings during a period when they have had more than ample funds to make the types of loans they had normally preferred. In many cases banks reached for loans they previously might have avoided. Banks which had not previously been active in real estate lending began to pursue real estate loans aggressively. Apparently, earning pressures also have induced a substantial increase in purchases of medium-term, tax-exempt securities, and the substitution of tax-exempt for Treasury securities.

Financial markets have felt the impact of such bank policies. It is not easy to separate the effect of higher time rates from the effect of a prolonged period of monetary ease. But it seems clear that some of the "reaching" on the part of banks reflects the changing mix of bank deposits and, possibly, pressures deriving from the impact of higher interest costs on bank earnings.

V. *Credit Quality and Policy Goals*

The danger associated with a serious decline in credit quality is that in a period of declining economic activity loan defaults will be large enough to cause a significant number of financial institutions to fail, or that defaults will be large enough to inhibit substantially the willingness of lenders to make additional loans. However, there are costs associated with *excessive concern* about credit quality and the urging of more rigorous credit standards on lenders. These are the costs that would be associated with promoting policies that discourage or limit competition among lenders and limit risk taking by lenders and potential borrowers.

We have already suggested that monetary ease, other things being equal, probably leads to some decline in credit quality. But this does not mean that monetary ease or a decline in credit quality are inherently bad. To oppose monetary ease on credit quality grounds, one should be prepared to offer evidence of the danger of high loan loss rates, and to weigh this danger against possible foregone economic activity arising from overly restrictive monetary policy.[6] It goes without saying that monetary policy may be considered "too easy" on other grounds, but an examination of those grounds and their applicability to recent experience are outside the scope of this discussion.

[6] In principle it would be possible to get the same level of aggregate spending with higher credit quality by combining more restrictive monetary policy with more expansionary fiscal policies. This, presumably, would give rise to a somewhat different output mix—say, more consumption or public spending at the expense of housing or business investment.

Current Legal and Regulatory Developments

There were a number of significant developments in banking law and regulation during the third quarter.

I. *Lending Limits*

An additional ruling was issued relating to the single-borrower lending limit of national banks (10 percent of the bank's capital and surplus, with thirteen statutory exceptions). The *sale of securities* by a bank to a bank customer *under an agreement* whereby the bank agrees *to repurchase* the securities at the end of a stated period of time was held to be a purchase and sale of such securities, and not a borrowing or a lending transaction. Such transactions are, therefore, subject neither to the lending limits (of 12 U.S.C. 84), nor to the borrowing limits (of 12 U.S.C. 82) placed on a National Bank.

Whether *capital debentures*, the issuance of which is governed by the Comptroller's Corporate Practices Regulation (12 C.F.R. 14.5), may be included in determining the lending limit of a national bank is a question presently under consideration by the Comptroller of the Currency.

II. *Real Estate Loans*

As was noted in this column in the September 1963 issue of the *Review*,[1] it has been concluded that a loan is not a "real estate loan" within the meaning of the statute merely because it is secured by real estate, but only where the bank relies upon real estate as the primary security for the loan. In this connection, the Comptroller has taken note of the fact that loans for home improvement purposes are generally made in primary reliance upon the credit standing of the borrower, insurance, collateral, or a combination of these factors. He has ruled that such home improvement loans are not to be considered real estate loans within the meaning of 12 U.S.C. 371, even though, as a matter of prudent banking practice, the bank takes additional security in the form of real estate liens which do not meet the requirements of that section.

It has recently been held by the Comptroller that if, in extending interim credit to finance the construction of an industrial or commercial building, or a residential or farm building, the lending bank is relying primarily for repayment of the loan on a commitment by a financially responsible lender to take up the loan upon completion of construction, the loan is not a real estate loan and will not be governed by the limitations as to the term of construction loans contained in the third paragraph of 12 U.S.C. 371.

The Comptroller has previously ruled that real estate is improved within the meaning of the statute (12 U.S.C. 371) when permanent construction or develop-

[1] *The National Banking Review*, September 1963, p. 135.

ment has contributed substantially to its value. These improvements may be in the immediate vicinity of, as well as on, the real estate itself. An 83-acre tract of undeveloped residential land which was almost completely surrounded by developed and rapidly developing residential property, and which was adjacent to a major university campus in the process of development, was recently held to be improved real estate. Land upon which a shell home has been placed on a basement or other permanent foundation, and connected with the usual utilities, such as water, gas, electricity, or a sanitary system, has also been held to fall within this definition.

A national bank may hold both first and second liens on real estate given as security, if there is no intervening lien and the aggregate of the amounts due on both mortgages and the terms of payment conform with the amortization provisions of the statute. In such a case the combined mortgages will be regarded as merging into one qualifying first lien. The Comptroller is of the opinion that where there exists an alternative intervening lien, such as in the case where the bank may compel the lessee of the mortgaged property to take over the first mortgage, the takeover agreement does not represent an intervening lien within the meaning of the statute.

Another limitation of the statute (12 U.S.C. 371) governing real estate loans relates to the amount of the loan, in relation to the appraised value of the real estate, a first lien on which is offered for security. A recent ruling permits the use of pledged collateral as an offset to any excessive portion of a real estate loan. For example, a real estate loan will not be considered in violation of the statute where the amount of the loan exceeds the limitations of that statute, if the excessive portion of the loan is fully secured by pledged collateral, in the form of a savings account, certificate of deposit, or other security to which the bank has ready access and first claim.

III. *Director's Stock Ownership*

A director of a national bank must own a minimum number of qualifying shares of the bank's stock in his own right in order to comply with applicable law (12 U.S.C. 72, 73). The Comptroller has ruled with respect to four situations frequently presented in inquiries concerning compliance with the requirement that the director own the stock in his own right.

(1) National bank stock pledged by the owner thereof to secure a loan is not owned in his own right for purposes of qualification as a director. (2) Shares of national bank stock purchased subject to an option in the seller to repurchase the shares are not owned by the purchaser in his own right for purposes of qualifying as a director of the bank. (3) Shares deposited in a voting trust where the depositor surrenders (a) legal ownership (depositor ceases to be registered owner of the stock), (b) power to vote the stock or to direct how it shall be voted, or (c) power to transfer legal title to the stock, are not owned so as to constitute a director's qualifying shares. (4) A national bank director's ownership of stock jointly with spouse constitutes the ownership of stock in such director's own right within the meaning and requirements of the applicable statutes.

IV. *Lease Financing*

As was noted in this column in the September 1963 issue of the *Review*,[2] the Comptroller has held that a national bank may become the owner and lessor of personal property acquired upon the specific request of, and for the use of a customer. It has further been held that the purchase of used, as well as new per-

[2] *The National Banking Review*, September 1963, pp. 136-137.

sonal property rests with the discretion of the bank; that it is not necessary that title to the property pass to the lessee upon expiration of the lease; and that it is not essential that the bank recover its full purchase price from the lease rentals where the property is reasonably expected to have a sufficient residual value.

There are two principal problems which arise in connection with the direct leasing activities of national banks: (1) the statutory authority of national banks to engage in these transactions; and (2) the extent to which the statutory lending limits are applicable.

Paragraph Seventh of 12 U.S.C. 24 authorizes a national bank to exercise "all such incidental powers as shall be necessary to carry on the business of banking; by discounting and negotiating . . . evidences of debt. . . ." Prior to the Comptroller's ruling, a lease financing transaction had been considered within the authority of a national bank only to the extent that the transaction could be regarded as the discount or the negotiation of an evidence of debt. It followed that such transactions were subject to the lending limits contained in 12 U.S.C. 84. It was previously recognized that certain lease paper could be discounted or negotiated and would qualify under exception 13 of 12 U.S.C. 84. Under some circumstances, the obligation of the discounter or negotiator of such paper (ordinarily the lessor) is not subject to the lending limit.

A study of lease financing indicated that transactions in which the economic function of the lessor had been reduced to a minimum were already an important part of the business of banking. In these transactions, a bank lent money to a lessor solely upon the credit of a lessee for the purchase of property specifically requested by the lessee for its immediate possession and use. The lessor acted solely as a holder of title and as a nominal debtor. He was a relatively expensive retailer of bank credit, necessary only because a lease transaction required an owner and lessor of property, and because the bank supervisors required an evidence of debt. The recognition that in some cases a lessee could be regarded as a debtor under 12 U.S.C. 84 approached but did not, in the Comptroller's view, reach the solution of the problem; debtor-creditor relationship did not meet the needs of the lessee.

The Comptroller has ruled that the "business of banking" as used in paragraph Seventh of 12 U.S.C. 24 is not limited to the transactions described in the succeeding clauses. His position is based upon the use of a semicolon at the end of the first clause of the paragraph. It is, therefore, not necessary to fit lease financing into the narrow confines of the negotiation of an evidence of debt. He has accordingly ruled that "the leasing by the bank of personal property acquired upon the specific request of and for the use of its customer, and the incurring of such additional obligations as may be incident to becoming an owner of personal property and the lessor thereof is a lawful exercise of the powers of a National Bank and necessary to the business of banking."

The limitation contained in 12 U.S.C. 84 applies specifically to the discounting, negotiation and guaranty of evidences of debt. It is the Comptroller's view that, since lease financing is not the negotiation of an evidence of debt for the purposes of 12 U.S.C. 24, it need not be regarded as such for the purpose of bringing it within the limitation of 12 U.S.C. 84. He has therefore ruled that the acquisition of personal property for lease financing is not within that limitation, and that the lease rental payments are to be regarded as compensation for the use of property and not as the payment of debt.

V. *Miscellaneous Powers*

In the past, a national bank has been permitted to make *acceptances*. The

Comptroller has ruled that, inasmuch as the making of acceptances by national banks is an essential part of banking (authorized by 12 U.S.C. 24), national banks are not limited by other statutes in the character of acceptances which they may make in financing credit transactions, and that bankers' acceptances may be used for such purposes.

The Comptroller has also ruled that when *data processing equipment* has been acquired for the primary purpose of performing service incidental to banking, it is proper for a national bank to make such equipment available for the use of others.

A national bank may now impose, subject to state law and consistent with contracts of deposit, such *service charges on dormant accounts* as its board of directors determine to be reasonable.

A national bank may also now provide for losses arising from cancellation of outstanding loans upon the death of borrowers. The Comptroller has held that the imposition of an additional charge, and the establishment of the necessary reserves in order to enable the bank to enter into such *debt cancellation contracts* and protect itself against losses arising therefrom, is a lawful exercise of the powers of a national bank and necessary to the business of banking.

The Comptroller has ruled that national banks may carry on indirectly *activities* which are *incidental to banking transactions* and in which they may engage directly. This would include acting as agents in the issuance of insurance, providing travel services, the leasing of personal property, and the performance of such other services as are incidental to the business of banking.

The Comptroller has recently concluded that, as a convenience to its customers, and as an adjunct to its authority to receive deposits, to loan money, and to negotiate checks and notes, a national bank may provide *messenger service*, by means of an armored car or otherwise, to meet the requirements of its customers, pursuant to an agreement whereunder it is specified that the messenger, in providing such service, is the agent of the customer. Under such an arrangement, all banking transactions must be carried on at the office of the bank.

VI. *Regulations K and M Revised*

Recent revisions have been promulgated by the Board of Governors of the Federal Reserve System of the Board's Regulation K, which governs corporations organized (under 12 U.S.C. 611-631) for the purpose of engaging in international or foreign banking or other international or foreign financial operations, and corporations having an agreement or undertaking with the Board of Governors (under 12 U.S.C. 601-604). The Board's Regulation M, which governs foreign branches of national banks, has also been revised. An analysis of these revisions appears at pp. 247-254 of this issue of *The National Banking Review*.

VII. *Investment Regulations*

The first major revision since 1934 in the regulation affecting the authority of national banks to purchase investment securities became effective on September 12, 1963. Pursuant to 12 U.S.C. 335, that regulation is applicable to state banks which are members of the Federal Reserve System. This new regulation differs from a previously published proposed revision principally in an expanded explanation of the authority for and the scope and application of the regulation, and in refinements of language.

The regulation defines the term "*investment security*" as a marketable obligation in the form of a bond, note or debenture which is commonly regarded as an investment security. Investments which are predominantly speculative in nature are excluded from this definition. The term "*public security*" is defined as

an obligation which is not subject to the limitations and restrictions of 12 U.S.C. 24 with respect to a bank's dealing in, underwriting, and purchasing for its own account investment securities. It includes obligations of the United States, general obligations of any state of the United States, or of any political subdivision thereof, and other obligations listed in paragraph Seventh of 12 U.S.C. 24. The term *"political subdivision of any State"* is defined to include a county, city, town or other municipal corporation, a public authority, and, generally, any publicly-owned entity which is an instrumentality of the state or of a municipal corporation. The phrase *"general obligation of any State or of any political subdivision thereof,"* which is defined as "an obligation supported by the full faith and credit of the obligor," includes "an obligation payable from a special fund when the full faith and credit of a State or any political subdivision thereof is obligated for payments into the fund sufficient to provide for the payments required in connection with the obligation."

The regulation provides that a bank may deal in, underwrite, purchase, and sell for its own account public securities, subject only to the exercise of prudent banking judgment. In the case of underwriting or investment, such prudence is considered to require a consideration of the obligor's resources and obligations, as well as a determination that such resources are sufficient to provide for all required payments in connection with the obligation.

In purchasing an investment security, a bank is required to make certain determinations with respect to the obligor's ability to perform. These determinations may be based, in part, upon estimates. Ordinarily, a bank's holdings of the investment securities of any one obligor are limited to 10 percent of the bank's capital and surplus. However, when the bank's determinations are based predominately upon estimates, the bank's total holdings of all such obligors is limited to 5 percent of the bank's capital and surplus.

These and other principles were applied in recent rulings of the Comptroller (made pursuant to 12 U.S.C. 24) on securities issued by the Public Utility District No. 2 of Grant County, Washington (Wanapum Hydroelectric Refunding Revenue Bonds); State of Washington (Public School Plant Facilities Bonds, 1961, and Public Building Bonds, 1961); and the State Highway and Bridge Authority of the Commonwealth of Pennsylvania.

Other provisions in the regulation pertain to: (a) limitations and restrictions of the purchase, sale, and holding of obligations of the International Bank for Reconstruction and Development, the Inter-American Development Bank, and the Tennessee Valley Authority; (b) credit information which must be maintained in connection with the exercise of prudent banking judgment; (c) requests for rulings by the Comptroller; (d) purchase of convertible securities; and (e) amortization of premiums. The restrictions and limitations contained in the regulation are inapplicable in the case of securities acquired through foreclosure on collateral, acquired in good faith by way of compromise of a doubtful claim, or acquired to avoid a loss in connection with a debt previously contracted.

VIII. *Collective Investment and Regulation 9*

Funds held by a national bank as fiduciary may be invested collectively where such investment is not in contravention of local law, and where it satisfies the requirements of Section 9.18 of the Comptroller's Regulation applicable to the exercise of fiduciary powers of national banks. Enabling statutes for the operation of collective investment funds

have been enacted by forty-nine states, the District of Columbia, and the Virgin Islands. Alaska is the only state which does not have such legislation at present.

Recently announced regulatory policies of the Comptroller with respect to collective investments under Section 9.18 are reviewed in the following paragraphs.

Reference to collective investment funds may appear in *advertisements* of a bank only in very restricted form. A bank may state, as part of an advertisement of the fiduciary services generally being offered, that it operates collective investment funds and will furnish copies of the plans and financial reports pertaining to them upon request. However, advertising which has reference to collective investment funds as one of its main or prominent features or purposes would violate Regulation 9. This applies to all forms of advertising—newspaper, brochures, or whatever. The use of agents by a bank, solely or primarily to promote its collective investment funds, is prohibited.

Regulation 9 permits the investment of funds in a common trust fund held as managing agent. *"Managing agent,"* as presently defined in the Regulation, includes only those agency accounts which confer, expressly or in effect, a power of attorney and investment discretion in the bank. Thus, these accounts establish both an agency and a trust relationship between the customer and the bank, making the bank an agent-trustee. There may be no agreement between the bank and the customer that the latter's funds will be invested in common trust funds. Nor may managing agency contracts be operated or held out as interests in a collective investment fund. Moreover, the bank, as trustee of the common trust fund, may not issue any document which represents an interest in a common trust fund, and the sale by a bank of interests in a common trust fund is prohibited.

Disclosure requirements are imposed in regard to the operation of all common trust funds. The plan and financial report of each collective investment fund must be made available to all who request them. The financial report must contain a list of the investments in the fund, showing the current market value of each investment. The report must also contain a statement for the period since the previous report, showing purchases, sales, and any other investment changes, income and disbursements, and appropriate notations as to investments in default, and those which are non-income producing. It should include a description of the fund's value on previous dates, and the income and disbursements of previous accounting periods. Failure to reveal material changes in the position of the fund may result in required amendments of the report. The report may contain no reference to the performance of funds other than those administered by the bank, nor representations or predictions as to future results.

A summarized copy of the financial report must be published by the bank in a newspaper of general circulation in the place where the principal office of the bank is located. The published report must conform to a format prescribed by the Comptroller. No illustrations or remarks unnecessary to the setting forth of the facts contained in the financial report are permissible. The individual investments need not be listed in this published financial report, but may be totaled in one entry for each type of investment.

A bank may not purchase any *interest in a collective investment fund,* or make loans secured by a participation in such a fund. If a bank acquires an interest because of a creditor relationship or any other reason, the participation must be withdrawn as of the first date on which such withdrawal can be effected. Overdrafts in accounts holding participations in such a fund shall not be considered in-

terests in such a fund, where (a) the account contains other assets which adequately protect the overdraft; or (b) the overdraft is eliminated by withdrawal from the collective investment fund on the first date after the creation of the overdraft on which such withdrawal can be effected. In the distribution of income of a collective investment fund, the principal cash of such a fund may be used, provided that all income received thereafter shall be applied against this advance until it is eliminated. In no case shall a distribution of income be made which exceeds the total of principal cash and income cash then on hand.

Funds of any *individual account* may not be invested in a collective investment fund where that fund holds any asset which could not legally be purchased by the individual account as an investment. For example, if the governing instrument limits investments to fixed-income securities, no funds of this account may be invested in a collective investment fund containing common stocks. However, this does not apply to an investment, the legality of which might be in question solely because it currently is non-income producing. In this respect, the fund may be judged as a whole in determining whether monies of a particular account may be invested therein.

Each *plan for a collective investment fund* must meet the requirements of section 9.18 (b)(1). That section requires, among other things, that the plan include provisions relating to the investment powers of the bank with respect to the fund. In order to comply with this requirement, all plans should state clearly the investment policy to be followed with respect to the fund; for example, the kinds of securities in which monies of the funds are to be invested. The plan must also reveal the allocation of income, profits and losses, the terms and conditions governing the admission and withdrawal of participations in the fund, and the auditing of accounts of the bank with respect to the fund. It must provide for a minimum frequency for valuation of the assets of the fund, which in no case shall be less often than once every three months, and which must specify the period following such valuation date during which the computations must be made. The basis and method of valuing assets in the fund should be explained therein. The plan must include all other information necessary to define clearly the rights of the participating fiduciary accounts in the fund.

After admissions and withdrawals, the principal cash and *readily marketable investments* of a collective investment fund must constitute at least 40 percent of the total market value of the principal of the collective investment fund as of that valuation date. A "readily marketable investment" within the meaning of section 9.18 (b) (9) (iii) is defined as:

1. A direct obligation of the United States, or other obligation fully guaranteed by the United States as to principal and interest, or an obligation of an agency of the United States, or of the International Bank for Reconstruction and Development or the Inter-American Development Bank.

2. A corporate stock, note, bond, or debenture (a) which is listed on a generally recognized exchange, or (b) which is so frequently traded in an over-the-counter market that its market value can readily be ascertained;

3. A note secured by a mortgage or trust deed, a substantial part of the principal of which note is also insured or guaranteed by an agency of the United States Government (commonly known as F.H.A. insured and V.A. guaranteed mortgages);

4. All other obligations which qualify as "investment securities" under the Investment Securities Regulation of the Comptroller of the Currency;

5. Any other obligation which shall be ruled to be "readily marketable" within the meaning of this paragraph by the Comptroller of the Currency.

The Comptroller has ruled that time certificates of deposit are "readily marketable investments" within the meaning of section 9.18(b)(9)(iii) of Regulation 9, in those circumstances in which, at the time the liquidity requirements of the Regulation must be met, there exists a ready market for the instruments in question. Noting that time certificates of deposit are not always readily marketable, he has held that the size of the issuing bank, the tenor of the certificate, and the conditions prevailing in the market are among the factors that influence the instrument's marketability. Any determination as to whether a particular time certificate of deposit is readily marketable within the meaning of Regulation 9 must be made on a case by case basis.

At the present time, conventional mortgages are not considered to be readily marketable. Section 9.18(b)(11)(iii) provides that *Mortgage Investment Funds* operated under section 9.17(d) of the prior Regulation 9 may continue to be operated under that section for "a reasonable time." Under present policy, such funds may continue to be operated under that section until the "40 percent in cash and readily marketable investments" requirement is met, provided that all investments made on or after April 5, 1963, are in readily marketable investments. However, no fund may be established under section 9.17(d) of the prior Regulation on or after April 5, 1963.

A bank may charge a *fee for the management of a collective investment fund;* however, in no case may the fee be higher than the fee charged a similar account not invested in the fund. The fees charged by the bank for administering any fiduciary account must be reasonable.

A bank may not operate a common trust fund for the *collective investment of cash balances* under the provisions of section 9.18 (c)(3), for the purpose of evading the provisions of section 9.18 (b). If a bank is operating more than one of such funds, the total investment in all of such funds on behalf of any particular account may not exceed $10,000. If the amount of total assets of such a fund is unreasonably large, the arrangement will be scrutinized to ensure that the fund has not been established as an evasion, and exists solely for the collective investment of cash balances which in the judgment of the bank are too small to be invested separately to advantage.

IX. *Merger Litigation*

Two proposed mergers involving national banks, both of which have recently been approved by the Comptroller of the Currency pursuant to the provisions of the Bank Merger Act of 1960 (12 U.S.C. 1828(c)), have been challenged in the courts as possible violations of Section 1 of the Sherman Act (15 U.S.C. 1) and Section 7 of the Clayton Act (15 U.S.C. 18).

In one action, the Crocker-Citizens case, the illegality of a proposed merger, as well as several earlier mergers involving the participating banks was alleged. The United States sought (1) preliminary and permanent injunctions against the merger, (2) an adjudication that certain earlier mergers completed by the defendant banks were illegal, and (3) a judgment requiring the defendants to take such action as might be necessary and appropriate to dissipate the effects of the alleged unlawful activities and to permit and restore competition in interstate and foreign commerce in commercial banking. A three judge court unanimously denied the government's motion for a preliminary injunction of the merger.

For the purpose of deciding that motion, the court assumed the correctness of the government's contentions that the "line of commerce" was commercial banking, and that the "sections of the country" were the entire state of California, the Los Angeles metropolitan area, and the San Francisco Bay area in considering whether the record indicated a possible or probable violation of Section 7 of the Clayton Act.[3] Addressing itself to the primary question of whether the merger acquisition might have the effect of lessening existing competition, the court noted that the participating banks were located in widely separated areas, and that there was no solid evidence that the banks competed against each other except in one county where the lessening of existing competition as a result of the merger would be *de minimis*.

The Court concluded that there was no showing that the effect of the proposed merger would be to lessen any existing competition substantially or at all, and it further concluded that the evidence with respect to the alleged potential competition by *de novo* branching on the part of the defendant banks was wholly insufficient to permit a finding of any lessening of competition in consequence of the merger. The Court held that there was nothing before it which would permit a finding "that there was even a prima facie case that could be made or even any suggestion of doubt as to there having been a violation of Section 7 of the Clayton Act." It further held that there was no basis for a prima facie case showing a contract, combination or conspiracy in restraint of trade in violation of Section 1 of the Sherman Act. *United States* v. *Crocker-Anglo National Bank, Citizens National Bank, and Transamerica Corporation*, Civil Action No. 41808 (D.C. N.D. Cal. 1963).

In the second case, the Hammond case, it was alleged that the merger would eliminate all competition between the participating banks in violation of Section 1 of the Sherman Act. It was further alleged that the effect of the merger may be substantially to lessen competition or to tend to create a monopoly in violation of Section 7 of the Clayton Act in the following ways, among others: (a) competition between the defendant banks will be completely and permanently eliminated; (b) competition generally in commercial banking in Hammond, Indiana, and in the service area of the defendant banks will be substantially lessened and a tendency to monopoly created; and (c) concentration in commercial banking in Hammond, Indiana, and in the service area of the defendant banks, will be substantially increased. *United States* v. *The Calumet National Bank of Hammond and Mercantile National Bank of Hammond*, Civil Action No. 3727 (D.C. N.D. Ind.).

In this case, a motion for a temporary restraining order was denied. Before the motion for preliminary injunction came on for hearing, the Comptroller of the Currency, who had found the proposed consolidation to be in the public interest, rescinded his approval of the application to consolidate. This rescission was in response to a request by the boards of directors of the applying banks. That request, the banks stated, was "motivated by the fact that the practicalities of such consolidation have been utterly impossible of accomplishment in the light of injunction proceedings instituted. . . ." The specific reasons given by the banks in making their request for the rescission included: the cost of the litigation; the

[3] Section 7 of the Clayton Act (15 U.S.C. 18) prohibits a corporation engaged in commerce from acquiring, "directly or indirectly, the whole or any part of the stock or other share capital . . . of another corporation engaged in commerce, where in any *line of commerce* in any *section of the country*, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly." (italics added)

long delay involved before the matter could finally be resolved in the courts; the difficulty of extending the agreement of consolidation until the litigation is terminated; and the possible effect of the litigation on the sale of additional capital stock as called for by the agreement of consolidation.

X. *Other Litigation*

In a recently decided case, a state bank sought permanently to enjoin the issuance by the Comptroller of a certificate to the organizers of a new national bank. The District Court, in denying the plaintiff's motion for a permanent injunction and in granting the motions to dismiss of the defendant Comptroller and the other defendants, held that (1) the Comptroller is not required by either the Administrative Procedure Act (5 U.S.C. 1001 et seq.) or any other statute to hold public hearings on applications for national bank charters; (2) the Comptroller is not required to publish regulations regarding the manner in which he passes on charter applications; and (3) there is no right to a judicial review to determine whether or not the Comptroller abused his discretion in dedeciding that a new national bank should be chartered. *The Trust Company of New Jersey* v. *James J. Saxon et al.*, Civil No. 532-63 (D.C.D.N.J. 1963).

In two actions, the plaintiffs sought to enjoin the operation by a national bank of a branch in a particular municipality, on the ground that state law did not permit the establishment of a branch in a municipality in which an existing bank has its principal office or a branch office. It was contended that the plaintiff state bank was the only bank which had legal authority to operate a branch in the municipality, inasmuch as it had received a certificate of authority to establish a branch in the municipality prior to the time that the national bank either received a branch certificate or commenced its branch operation. See *Suburban Trust Company* v. *National Bank of Westfield,* 211 F. Supp. 694 (D. N.J. 1962). In affirming the national bank's right to establish and operate a branch in a particular municipality, and in denying the right of the state bank to establish and operate a branch in that same municipality, the court noted that the applicable state branching law authorized a bank to establish a branch anywhere in the county in which the bank's principal office is located, but prohibited the establishment of a branch in a municipality (other than where the bank's home office is located) in which any banking institution has its principal office or a branch office. The court held that the language of the applicable statutes "requires the interpretation that a bank 'has' a branch in a municipality, for the purpose of determining the right of another bank to open a branch there, only when it has a branch in operation and not when it merely has the approval of the appropriate governmental authority to open a branch." *Suburban Trust Company* v. *National Bank of Westfield,* Civil Number 837-62 (D.C.C. N.J. 1963).

Three recently initiated actions seek permanently to enjoin the Comptroller's issuance of two branch certificates. In all three cases it is contended that issuance of the branch certificates would be in violation of the capital requirements of the state statute as incorporated into the applicable Federal branching legislation. The plaintiffs also question the necessity of the proposed banking offices, and they claim that in connection with the disputed branch applications they are entitled to agency hearings, to present evidence, to examine the branch applications, to cross-examine witnesses, to have a record made of the proceedings, and to have the Comptroller issue an order adjudicating the branch applications. *First National Bank of Smithfield* v. *First Na-*

tional Bank of Eastern North Carolina and James J. Saxon, Comptroller of the Currency, Civil Action No. 1460 (D.C. E.D. N.C.); *First-Citizens Bank and Trust Company* v. *James J. Saxon,* Civil Action No. 1476 (D.C. E.D. N.C.); and *First National Bank of Smithfield* v. *First National Bank of Eastern North Carolina and James J. Saxon,* Civil Action No. 1477 (D.C. E.D. N.C.).

Noteworthy in connection with the preceding lawsuits is an action by a national bank seeking judicial review of action by a state superintendent of banks in granting the application of a state bank for a new branch. The court held that the plaintiff national bank had no legal standing to obtain judicial review of branch approval, and it stated that the applicable statute required a finding by the Superintendent "that the public convenience and advantage will be promoted" by the granting of the branch application, not merely a finding that the convenience and advantage of existing banks would be promoted. The court further stated that the Superintendent was only required to make an investigation, and that he was not required either to hold formal hearings at which the public generally, as well as banks claiming to be affected, could present witnesses and cross-examine other witnesses, or to promulgate rules and regulations setting forth the standards to be applied in passing upon branch applications. *In the Matter of Franklin National Bank,* 150 NY.L.J. No. 61, p. 14 (N.Y. S. Ct. 1963).

A suit was brought against a state banking commissioner by the prospective organizers of a new bank who claimed that they had complied with all of the requirements of law, and that the banking commissioner's action in refusing a certificate of authority to establish a new bank was illegal, unreasonable, capricious, and arbitrary. The defendant banking commissioner responded that the proposed capital structure was inadequate, that there was no economic need or necessity in the particular area for a new bank, that the earnings prospects submitted in the application were overstated, and that there was insufficient diversification in subscription of the authorized capital stock. The State Court of Appeals, which affirmed the lower court's denial of a writ of mandamus because such writ will issue only when the duty required to be performed is not discretionary, held that the petitioners failed to meet the burden of proving that the defendant banking commissioner acted in an arbitrary and capricious matter. *State* v. *Jeansonne,* 144 So. 2d 159 (La. 1962).

In another case, the question presented was whether a state banking commissioner had the authority and the duty to issue a certificate of authority to operate a new bank, even though an appeal had been taken from the state banking board's order granting a new bank charter. The state supreme court held that, notwithstanding the pending appeal, the state banking commissioner could be required by a writ of mandamus to issue a certificate of authority to operate a new bank, inasmuch as the board, in the exercise of its discretion, had previously approved the new bank application. *Chemical Bank & Trust Company* v. *J. M. Falkner,* 369 S.W. 2d 427 (Tex. 1963).

In an action for a declaratory judgment against the Comptroller by a national bank, the court ruled that a proposed drive-in facility would not constitute a separate branch in violation of the applicable statutory restrictions on branching. The facility involved in this case was a small structure connected by a pneumatic tube with an existing branch located five hundred feet away. The court ruled that to make an existing branch accessible to customers arriving in automobiles did not constitute the opening of a new branch. It held that the words "additional office" must be rea-

sonably construed as meaning a separate and independent office, operating in the same way as branch banks generally operate, and not merely additional office space to an existing facility. *Michigan National Bank* v. *James J. Saxon*, Civil Action 821-62 (U.S.D.C.D.C. 1962).

In an action involving the income tax liability of a foreign corporation and an American bank, the District Court enjoined a transfer of funds allegedly held by the defendant bank's foreign branch for the accounts of the corporation. The United States Court of Appeals for the Second Circuit concluded that the injunction was beyond the jurisdiction of the District Court as to any deposits of the foreign corporation held and payable only at a foreign branch of the American bank. The injunction was modified in such a way as to preserve any rights of the Government should it appear that the foreign corporation's accounts were in fact payable in the United States. A petition for rehearing by the full bench has been granted. *United States* v. *First National City Bank*, 321 F. 2d 14 (2nd Cir. 1963).

Following the consolidation of a national bank and a state bank under the charter of the former, pursuant to the approval of the Comptroller of the Currency, a Federal stock transfer tax was imposed upon the transfer of the state bank's portfolio of securities, upon the transfer to the stockholders of the state bank of its right to receive stock of the consolidated institution, and upon the issue of new stock by the resulting national bank. The District Court, in a suit by the resulting national bank to recover these taxes, held that although the statute (12 U.S.C. 215a) providing that upon such a consolidation the corporate existence of each constituent bank shall be merged into and continued in the consolidated national bank precluded the imposition of Federal taxes upon the transfer of the state bank's portfolio of securities or upon the transfer to the state bank stockholders of the state bank's right to receive stock of the consolidated continuing institution, it did not preclude the imposition of original issue taxes to the extent that the exchange of both of the consolidating bank's stock for the stock in the consolidated institution resulted in a dedication of additional capital. *Fidelity-Baltimore National Bank* v. *United States*, 213 F. Supp. 631 (D. Md. 1963).

In a national bank's suit against a state taxing authority in which there was claimed a refund of sales tax paid by it upon sales of office machinery and supplies to it, the state supreme court held that the tax did not violate congressional restrictions imposed upon taxation of national banks (by 12 U.S.C. 548), inasmuch as the tax in question was levied not upon the national bank, but rather upon the vendor that sold the office equipment and supplies to the bank. *National Bank of Hyde Park in Chicago* v. *Isaacs*, 188 N.E. 2d 704 (Ill. 1963).

The question of whether a mutual savings bank's practice of maintaining interest-free demand checking accounts was *ultra vires* under the state banking act was raised in an action by a national bank seeking permanently to enjoin such practice. The court noted that there was no express provision in the law either prohibiting or authorizing such practice, and observed that both the state legislature and the commissioner of banking and insurance knew that some savings banks in the state provided checking account services when the legislature enacted the law which permitted a savings bank "to receive money on deposit . . . according to the usual custom of savings banks." The court stated that the directness with which the legislature dealt with commercial bank practice as to non-interest-bearing demand deposits did not stand as authority for the proposition that savings banks could not do so. The right

of the mutual savings banks to maintain interest-free demand checking accounts was approved by the court on the basis of legislative acquiescence in a long-standing administrative interpretation. *Hudson County National Bank* v. *Provident Institution for Savings in Jersey City*, 193 A. 2d 697 (N.J. 1963).

In a case decided by the United States Court of Appeals for the District of Columbia Circuit, it was held that where United States branches and affiliates of Japanese banks were involuntarily closed when World War II began, depositors who had deposited dollars for conversion into yen deposits at the then prevailing rate of exchange were entitled to receive dollars from the fund owned by banks and held by the Alien Property Office for their yen receipts at the rate of exchange which prevailed when commercial intercourse first became lawful in the postwar period, and not at the rate prevailing on December 7, 1941, the last day that the Japanese banks were open for business. *Aratani* v. *Kennedy*, 317 F. 2d 161, (D.C. Cir. 1963).

The United States Court of Appeals for the First Circuit vacated a judgment, set aside a verdict of guilty, and remanded for a new trial a case in which a bank president was charged with wilfully misapplying funds belonging to a national bank in violation of a criminal statute (18 U.S.C. 656). The prejudicial error committed by the trial court was its charging the jury that, as a matter of law, funds in an escrow account belonged to the bank, and its refusal to submit to the jury the question of whether the defendant bank officer received the funds in his individual capacity or as an agent for the bank. The Court of Appeals noted that funds do not become bank funds solely because one who is an officer of the bank receives them, irrespective of the capacity in which he does so, and when a bank officer holds funds in a fiduciary capacity for others, they do not become funds of the bank, even though he deposits them in his own bank. *Golden* v. *United States*, 318 F. 2d 357 (1st Cir. 1963).

In an action arising out of a bank's refusal to pay a cashier's check issued in exchange for a forged check, the District Court dismissed the complaint, entered judgment for the defendant, and held that the plaintiff bank knew, or by the exercise of reasonable care and diligence exercised by bankers in these matters should have known of some defect or infirmity in the check given to it by its customer. The Court concluded that the plaintiff bank acted in bad faith in representing that it had a genuine check of its depositor, and in concealing information in its possession that would convince an ordinary and reasonable banker that the check was defective, that the plaintiff bank by its endorsement guaranteed all prior endorsement and the genuineness of the instrument, that the cashier's check was issued without consideration, that the plaintiff had changed its position in no manner in reliance upon its issuance, that the plaintiff lost none of its rights against its customer and endorser, and that the defendant bank rightfully and properly stopped payment on its cashier's check issued to the plaintiff. *Citizens Bank of Booneville* v. *National Bank of Commerce*, 217 F. Supp. 193 (N.D. Okla. 1963).

XI. *Proposed Legislation*

Several important bills affecting the power of national banks and, in some respects, other banks were introduced in the present session of the Congress. These relate to: (1) the single borrower lending limit; (2) mortgage lending; (3) forest tract loans; and (4) underwriting powers.

The *lending limits* statute (12 U.S.C. 84) applicable to national banks prohibits the loaning to any one customer

of an amount in excess of 10 percent of its capital and surplus, although this limitation is subject to certain stated exceptions. This basic limitation of 10 percent of capital and surplus has not been changed since 1906. The proposed legislation (H.R. 8247) would increase this basic lending limit from 10 percent of capital and surplus, to 20 percent of capital and surplus. It would also raise the lending limits under the statutory exceptions pertaining to loans involving guaranteed short term paper (exception 4), loans secured by shipping documents or warehouse receipts covering readily marketable staples (exception 6), loans secured by livestock and dairy cattle (exception 7), loans secured by obligations of or guaranteed by the United States (exception 8), loans insured by the Secretary of Agriculture (exception 12), and obligations as endorser or guarantor of installment consumer paper (exception 13). Another bill (H. R. 661) has been introduced in the House of Representatives which would amend the lending limits statute (12 U.S.C. 84) by increasing the basic lending limit of national banks from 10 percent of capital and surplus, to 15 percent of capital and surplus.

The law (12 U.S.C. 371) pertaining to the *mortgage loan activity* of national banks now specifies that such institutions may not make conventional loans in excess of 75 percent of the appraised value of improved real estate, and may not offer a conventional mortgage for longer than twenty years. The proposed legislation (H.R. 7878) would modify these limitations by permitting national banks to make conventional real estate loans for not more than 80 percent of the appraised value of the property, and for a term of not more than thirty years.

National banks currently may make loans (pursuant to 12 U.S.C. 371) on *forest tracts* only up to 40 percent of the appraised value of the economically marketable timber offered as security. The maximum term of such loans is now two years for unamortized loans, and ten years for fully amortized loans. The proposed legislation (H.R. 8230) would permit national banks to make real estate loans secured by first liens upon forest tracts which are properly managed in all respects. It would increase the maximum permissible loan to 60 percent of the appraised fair market value of the growing timber, plus the value of the lands and improvements thereon offered as security. The maximum term would be increased to 3 years for unamortized loans, and to 15 years for amortized loans.

National banks are limited in their purchase, sale, dealing in, *underwriting, and holding of investment securities* by statute (12 U.S.C. 24) and by regulations issued by the Comptroller of the Currency. The statutory authority of national banks to engage in the underwriting and trading of securities is presently limited to general obligations of states and municipalities and obligations of the United States.

The proposed legislation (H.R. 5845) would modify these statutory limitations. The first of two amendments would confer upon national banks and state banks that are members of the Federal Reserve System powers with respect to short-term obligations of public housing agencies that are secured by an agreement by the state to lend to the agency an amount sufficient to pay such short-term obligations at their maturity. Investment in such obligations would not be subject to the ordinary limitations and requirements (of 12 U.S.C. 24 and 12 U.S.C. 335) with respect to the securities investments of these banks. These banks would also be permitted to underwrite and deal in such obligations. This proposed change is intended to place obligations of local public housing agencies, with respect to which states are obligated to lend amounts sufficient to pay the principal and interest, on the same basis as obligations of local pub-

lic housing authorities with respect to which the Public Housing Administration is obligated to lend amounts sufficient to pay the principal and interest.

The proposed legislation would also permit national banks and state banks which are members of the Federal Reserve System to deal in and underwrite obligations issued by a state or political subdivision or agency of a state or political subdivision, except obligations payable solely from the proceeds of special benefit assessments. By this legislation these commercial banks would be authorized to engage in the underwriting of revenue bonds as well as general obligations of state and local governments. However, this proposed legislation would permit these commercial banks to underwrite, trade and deal in municipal bonds only to the extent that they are permitted to invest in such bonds. These banks would be allowed to own or become obligated to buy these bonds only up to 10 percent of their capital and surplus. The risk level would, thus, not be raised by this legislation.

In addition to these four measures, other significant banking legislation is now before the Congress. A bill (S. 1624) which passed the Senate on July 30, 1963, would amend the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, and extend the *disclosure requirements* of those acts to commercial banks with 750 or more shareholders, for two years following the date of its enactment. Thereafter, such disclosure requirements could be extended to all commerical banks with 500 or more shareholders. The powers, functions and duties vested in the Securities and Exchange Commission concerning registration requirements for securities, reporting requirements, proxy solicitations, and insider transactions, would be vested in the Comptroller of the Currency with respect to national banks and banks operating under District of Columbia laws, in the Board of Governors of the Federal Reserve System with respect to all other member banks of the Federal Reserve System, and in the Federal Deposit Insurance Corporation with respect to all other insured banks. A similar bill (H.R. 6789) has been introduced in the House of Representatives.

Another bill (H.R. 8499) would amend the Securities Act of 1933, as amended, the Securities Act of 1934, as amended, and the Investment Company Act of 1940, as amended, and provide for the regulation of *collective investment funds* administered by commercial banks and trust companies in a fiduciary capacity. This bill provides that any bank or trust company maintaining one or more collective investment funds would be required to observe certain disclosure and investment requirements in accordance with certain statutory standards and such further rules and regulations as may be prescribed by the Comptroller of the Currency. Enforcement of these statutory requirements and rules and regulations would be the responsibility of the Comptroller of the Currency in the case of national banks and banks operating under the laws of the District of Columbia, the Board of Governors of the Federal Reserve System in the case of state member banks (except those in the District of Columbia), the Federal Deposit Insurance Corporation in the case of state non-member insured banks (except those in the District of Columbia), and whichever of these supervisory agencies is chosen by other banks operating collective investment funds subject to the statute. A similar bill (S. 2223) has been introduced in the Senate.

A summary of the purposes of other bills of interest to banks, which were introduced into the first session of the Eighty-Eighth Congress, follows:

1. permit the regular annual meeting of national bank shareholders to be held on such day of each year as is specified therefor

in the bank's by-laws, rather than on such day in January of each year as is specified therefor in the bank's articles of association (S. 2228);

2. transfer chartering and supervisory authority over foreign branches of national banks from the Board of Governors of the Federal Reserve System to the Comptroller of the Currency (H.R. 5800);

3. place membership of national banks in the Federal Reserve System on a voluntary rather than on a compulsory basis (H.R. 5879);

4. authorize the Comptroller of the Currency to establish reasonable maximum service charges which may be levied on dormant accounts by national banks (H.R. 796);

5. prohibit any member of the Board of Directors of the Federal Deposit Insurance Corporation from concurrently holding any other public office or position (thereby removing the Comptroller of the Currency as a director of the Federal Deposit Insurance Corporation) (H.R. 706);

6. enable the Federal Reserve banks to extend credit to banks which are members of the Federal Reserve System, and to individuals, partnerships, and corporations, in accordance with current economic conditions. (S. 2076, H.R. 8505);

7. provide for the retirement of Federal Reserve bank stock (H.R. 3783);

8. prohibit commercial banks insured by the Federal Deposit Insurance Corporation from accepting deposits in excess of certain percentages of their outstanding real estate loans (H.R. 663);

9. extend the maximum maturity of Veterans Administration guaranteed or insured home loans from thirty to thirty-five years (H.R. 230);

10. require full disclosure of finance charges in connection with extensions of credit (H.R. 7022, S. 750);

11. empower the Federal National Mortgage Association to deal in conventional mortgages, and to provide otherwise for its further development as a secondary market facility (S. 2130);

12. authorize the chartering of organizations to insure conventional mortgage loans, authorize the creation of secondary market organizations for conventional and other mortgage loans, authorize the issuance of debentures upon the security of insured or guaranteed mortgages, and create a joint supervisory board to charter and examine such organizations (S. 810);

13. authorize the chartering and establishment of federal mutual savings banks (H.R. 258, H.R. 795);

14. limit federal savings and loan associations in the establishment and operation of new branches to those locations where state savings and loan associations or state banks and trust companies are permitted by state law or practice to establish and operate new branches (H.R. 3734);

15. authorize federal savings and loan associations to establish special deposit accounts for pension or retirement trust funds; authorize these associations and other members of the Federal Home Loan Bank System to act as trustees for stock bonus, pension, and profit-sharing plans; broaden the investment authority of federal savings and loan associations to include obligations of federal agencies, and of the states and local governmental entities, including special obligations as defined by the Federal Home Loan Bank Board; authorize federal savings and loan associations to make loans for furnishing, equipping, or promoting the livability of a home, as well as for paying the expenses of a college education, or acquiring a mobile dwelling; qualify institutions insured by the Federal Savings and Loan Insurance Corporation as depositories for funds of the federal Government; grant to savings and loan associations authority similar to that granted to commercial banks to establish service corporations; and authorize small business investment companies to place idle funds in institutions insured by the Federal Savings and Loan Insurance Corporation (H.R. 8245);

16. enable Federal Home Loan Banks to implement their services to member institutions by establishing a secondary marketing facility for participations in conventional home mortgage loans (S. 811);

17. establish a Federal Deposit and Savings Insurance Board to manage the Federal Deposit Insurance Corporation and the Federal Savings and Loan Insurance Corporation (H.R. 729);

18. increase maximum insurance cover-

age of deposit and share accounts from $10,000 to $25,000 per account (S. 106, H.R. 5130);

19. increase maximum insurance coverage of deposit and share accounts from $10,000 to $15,000 per account (S. 1799, H.R. 7404);[4]

20. provide for the establishment of an International Home Loan Bank (S. 474, H.R. 8143);

21. extend and broaden the authority to insure mortgages under the National Housing Act (H.R. 8061);

22. eliminate the provision in the National Housing Act which limits mortgages thereunder to the cost of the physical improvement involved (H.R. 5048);

23. permit federal employees to purchase shares of federal or state chartered credit unions through voluntary payroll allotment (H.R. 4735);

24. authorize the Secretary of the Treasury to fix the interest rates on loans by the Treasury to the Department of Agriculture to carry out programs authorized by the Rural Electrification Act of 1936 (S. 1855);

25. amend the Internal Revenue Code of 1954 concerning the priority and effect of federal tax liens and levies (H.R. 4952);

26. authorize the United States Governor of the International Bank for Reconstruction and Development to vote for an increase in the bank's authorized capital stock (S. 1603, H.R. 7405).

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[4] Under the bills described in (19), it is proposed that the Board of Governors of the Federal Reserve System, the Board of Directors of the Federal Deposit Insurance Corporation, and the Federal Home Loan Bank Board be given standby control over interest and dividend rates payable on deposit and share accounts. This legislation, if enacted, would impose new liquidity requirements on members of the Federal Home Loan Banks, and it would impose on insured state banks which are not members of the Federal Reserve System many of the restrictions and requirements presently imposed on member banks by the Federal Reserve Act, the Banking Act of 1933, the Bank Holding Company Act of 1956, and the Federal Deposit Insurance Act. Other provisions of this legislation would place new restrictions and requirements on the operations and activities of national banks, state member banks, state insured non-member banks, members of the Federal Home Loan Banks, and other institutions, the accounts of which are insured by the Federal Savings and Loan Insurance Corporation.

Current Banking and Economic Developments

I. *The Third Call, 1963*

Several distinctive features of the call for Reports of Condition at the end of September 1963 are discussed in sections II and III. This section sets out some of the statistical generalizations of the data collected from 4,584 commercial banks under the supervision of the Comptroller of the Currency. Emphasis will be placed on the 4,577 national banks; the other seven are non-national banks in the District of Columbia.

While total deposits held by national banks rose by 8.7 percent between September 1962 and September 1963,[1] to a level of $147.3 billion—as compared with a rise of 8.3 percent for the previous year—a smaller fraction of this increase took place in the quarter between June and September 1963. Total deposits increased by only 1.2 percent in the June-September 1963 period, less than the previous year. The growth in time and savings deposits (15.2 percent) outstripped the increase in demand deposits (4.6 percent) for the year; the last quarter saw a very small rise in demand deposits, 0.3 percent, and a rise in time and savings deposits of 2.6 percent—similar to the June-September rise for the two previous years. While the growth of time and savings deposits has been similar in the last three June-September periods, there has been a very significant difference in the behavior of demand deposits. The recent small increase, 0.3 percent, is markedly smaller than the growth in demand deposits for either June-September 1962 (0.7 percent) or June-September 1961 (2.1 percent). The increase in demand deposits between September 1962 and June 1963, however, was greater than that for the similar period a year earlier.

Time and savings deposits now constitute 41 percent of total deposits, as compared with 36 percent two years earlier in September 1961, before the maximum interest rate permitted to be paid on time and savings deposits was raised to 4 percent.

Loans and discounts (gross) of national banks rose 11.5 percent over the year September 1962-63, somewhat more than the 10.2 percent increase for the year before this one. Again, this reflects a greater growth in the earlier part of the year, since the June-September 1963 increase of 2.0 percent was considerably smaller than that for similar periods in 1961 and 1962.

Total assets of national banks grew at about the same rate in the third quarter of 1963 as in 1962—about 1.9 percent—although much slower than the 2.8 percent increase for the comparable period in 1961. These assets have grown somewhat more in the last year (about 9.0

[1] All references in this section to "year" relate to a 12-month period ending in September.

percent) than in the previous year (7.8 percent).

The capital of national banks, now at $13.3 billion, grew more in the third quarter of 1963 (2.5 percent) than in the third quarter of either 1961 or 1962; it increased by 6.5 percent between September 1962 and September 1963, less than during the previous comparable year, when the rate of growth was 7.2 percent.

II. *New Data*

Several new items were introduced in the September 1963 Report of Condition for national banks, with the result that we now have information on such items as Federal funds sold and purchased; direct lease financing; time certificates of deposits outstanding; and three valuation reserves.

Table 1 lists the major assets of national banks, including the $1.1 billion of Federal funds sold. There were 204 national banks in 43 states involved in these sales. In only California and New York did sales of Federal funds exceed $100 million. Only 112 national banks in 32 states purchased Federal funds. To date these are the only published data in this significant area.

Authority to undertake direct lease financing was granted to national banks earlier this year. At the end of September 1963, 27 national banks in 19 states had initiated $5 million of this type of activity.

National banks held $2.0 billion in valuation reserves as of September 30, 1963. Reserves for loan losses under the Internal Revenue Code were held by 67 percent of national banks, and totaled $1,529 million, or 76 percent of all their valuation reserves; 17 percent of national banks held valuation reserves for securities in the amount of $298 million, or 15 percent of their total valuation reserves; and 8 percent of national banks possessed other valuation reserves equal to $191 million, or 9 percent of their total valuation reserves. Banks must pay taxes on all of their valuation reserves, except those allowable under the Internal Revenue Code. Since many bankers feel that their tax-free reserves are not large enough, they have accumulated in other valuation reserves an additional buffer against loan losses.

III. *The Simplification of Report of Condition and Public Disclosure*

This Office has been studying the various forms and reports, especially the Report of Condition, that national banks are required to complete for the Comptroller of the Currency. With respect to the Report of Condition, the first revisionary step was taken in August, effective with the September 30, 1963 report.

Several significant changes were initiated with the third call of 1963. First, recent changes in the Comptroller's rules and regulations were effectuated with this call report. For the first time, there were separate categories for Federal funds sold and Federal funds purchased. These categories reflect the fact that Federal funds transactions are no longer considered to be loans and borrowings. Further, since national banks are now permitted to engage in direct lease financing, a separate category for such transactions was also initiated with the September 1963 Report of Condition.

Perhaps the most significant change was the specific inclusion of valuation reserves. For the first time, all national banks were required to identify their valuation reserves in their Report of Condition and to publish them in detail. These include reserves for loan losses under the Internal Revenue Code, valuation reserves on securities, other valuation re-

serves, and the total of these three items. Since these valuation reserves were set up on the liability side of this Report, the assets (against which these valuation reserves are held) are now entered at their gross values. Other commercial banks are not required to report and publish details on their valuation reserves.

SHERMAN SHAPIRO
Senior Economist, Office of the Comptroller of the Currency

Selected Statistical Data

Table No.	*Title of Table*
1	Number of national banks, total and principal assets of national banks, by states, September 30, 1963
2	Selected liabilities and valuation reserves of national banks, by states, September 30, 1963
3	Capital accounts of national banks, by states, September 30, 1963
4	Status of applications for national bank charters as of September 30, 1963, and charters issued July 1–September 30, 1963
5	*De novo branch applications* of national banks, by states, July 1 through September 30, 1963: received approved, abandoned and pending as of September 30, 1963
6	Branches of national banks: in operation June 28, 1963, opened for business, discontinued or consolidated, July 1–September 30, 1963, and branches in operation September 30, 1963
7	Branches of national banks authorized, July 1–September 30, 1963, by community size and size of bank
8	Mergers, July 1–September 30, 1963

Table 1.—Number of national banks, total and principal assets of national banks, by states, September 30, 1963

(Dollar amounts in millions)

State	Number of banks	ASSETS							
		Total Assets	Cash Assets‡	U.S. Government obligations, gross	State and local securities, gross	Other bonds, notes, gross	Loans and discounts, gross	Federal funds sold	Direct lease financing
United States	4,577	$167,892	$28,886	$33,379	$16,153	$2,304	$81,642	$1,060	$ 5
Alabama	73	1,975	370	411	208	21	921	3	†
Alaska	5	225	35	51	10	7	107	7	0
Arizona	3	1,321	180	157	77	4	849	5	0
Arkansas	58	906	187	177	107	16	394	6	0
California	50	24,011	3,721	4,032	2,040	273	12,960	114	1
Colorado	100	1,966	370	400	112	12	998	17	0
Connecticut	23	1,562	278	201	214	13	810	6	0
Delaware	5	21	3	7	1	†	10	0	0
Dist. of Col.	6	1,175	239	313	53	5	528	13	0
Florida	151	4,083	812	1,072	325	81	1,632	23	†
Georgia	54	2,153	474	315	139	15	1,156	0	0
Hawaii	2	329	41	71	20	1	180	0	0
Idaho	10	584	78	123	49	2	319	0	0
Illinois	404	16,227	2,450	3,692	1,795	419	7,484	73	†
Indiana	125	3,602	650	901	237	64	1,649	31	0
Iowa	100	1,317	299	296	105	17	552	26	†
Kansas	168	1,657	291	429	188	31	686	5	†
Kentucky	83	1,248	213	318	109	18	566	2	†
Louisiana	44	2,324	476	587	192	18	996	9	1
Maine	22	432	67	81	34	4	229	6	0
Maryland	46	1,679	310	346	129	20	803	34	0
Massachusetts	93	4,728	981	710	333	27	2,505	25	0
Michigan	87	6,359	933	1,458	722	35	3,026	61	†
Minnesota	185	3,635	694	742	262	73	1,774	1	†
Mississippi	28	513	91	109	58	3	240	0	0
Missouri	82	2,741	594	541	217	20	1,253	69	†
Montana	46	548	86	128	41	15	263	0	†
Nebraska	121	1,461	293	282	97	21	726	15	0
Nevada	3	434	55	77	52	6	226	0	0
New Hampshire	52	407	73	79	26	1	216	1	0
New Jersey	144	5,478	707	1,163	742	130	2,610	17	1
New Mexico	30	631	105	160	31	3	293	27	0
New York	211	17,563	2,992	2,792	1,965	186	8,722	235	0
North Carolina	31	1,474	315	199	103	30	787	2	0
North Dakota	39	485	63	129	42	14	221	1	†
Ohio	218	7,785	1,246	1,745	721	96	3,782	49	†
Oklahoma	208	2,804	589	649	214	40	1,249	3	†
Oregon	11	2,264	359	408	197	27	1,202	5	0
Pennsylvania	414	11,809	1,748	2,425	1,953	164	5,235	28	1
Rhode Island	4	645	58	71	128	3	371	1	0
South Carolina	26	864	172	199	58	11	392	8	0
South Dakota	33	545	74	138	31	9	277	2	0
Tennessee	74	3,086	642	578	222	43	1,526	17	0
Texas	513	12,323	2,676	2,422	970	167	5,655	55	†
Utah	8	596	91	65	56	5	359	11	0
Vermont	28	258	30	60	16	3	142	2	0
Virginia	121	2,644	405	503	224	51	1,383	20	0
Washington	25	3,156	569	563	256	26	1,644	12	0
West Virginia	76	903	147	300	55	11	369	4	0
Wisconsin	104	2,560	488	608	193	41	1,167	7	†
Wyoming	29	371	63	89	22	3	181	3	0
Virgin Islands	1	25	2	6	1	0	16	0	0
D.C.—all *	13	2,099	386	548	82	12	1,109	13	0

* Includes national and nonnational commercial banks in the District of Columbia, all of which are supervised by the Comptroller of the Currency.

† Less than $500,000.

‡ Cash, balances with other banks, and cash items in process of collection.

Note: Data may not add to totals because of rounding.

Table 2.—Selected liabilities and valuation reserves of national banks, by states, September 30, 1963

(Dollar amounts in millions)

State	LIABILITIES				VALUATION RESERVES				
	Total liabilities	Demand deposits IPC	Time deposits IPC	Time certificates of deposit	Federal funds purchased	Total valuation reserves	IRC reserves‡	Securities§	Other
United States	$152,540	$64,906	$55,673	$10,931	$1,126	$2,018	$1,529	$298	$191
Alabama	1,782	859	580	124	0	27	24	3	†
Alaska	208	88	56	34	0	4	4	†	†
Arizona	1,223	516	528	65	0	10	8	2	0
Arkansas	825	399	245	97	0	7	6	1	†
California	22,228	8,169	10,094	546	396	262	230	25	7
Colorado	1,789	842	623	143	4	18	16	2	1
Connecticut	1,420	753	387	68	15	18	16	2	†
Delaware	19	9	10	†	0	†	†	0	0
Dist. of Col.	1,080	648	304	82	0	8	8	0	0
Florida	3,706	1,747	1,163	271	27	31	30	1	1
Georgia	1,959	968	433	153	42	17	13	4	†
Hawaii	297	111	109	35	0	1	1	0	0
Idaho	535	252	214	23	0	5	5	†	0
Illinois	14,623	5,906	5,412	1,131	219	295	202	81	12
Indiana	3,261	1,543	1,041	134	12	34	26	7	1
Iowa	1,201	536	345	136	11	12	10	†	1
Kansas	1,492	713	398	133	1	11	9	1	†
Kentucky	1,118	625	312	78	0	14	8	5	1
Louisiana	2,109	1,017	550	118	13	17	9	3	5
Maine	388	177	149	5	0	4	3	1	†
Maryland	1,535	732	480	40	0	10	9	1	1
Massachusetts	4,180	2,301	861	205	13	93	53	24	17
Michigan	5,873	2,147	2,602	534	5	57	48	5	3
Minnesota	3,309	1,309	1,213	660	21	30	20	7	3
Mississippi	466	205	142	67	2	6	5	1	†
Missouri	2,486	1,203	646	220	8	23	15	7	†
Montana	503	232	192	91	3	6	5	1	†
Nebraska	1,317	679	312	143	2	15	12	3	1
Nevada	401	172	148	9	0	4	1	2	†
New Hampshire	362	198	90	7	1	4	3	1	†
New Jersey	5,010	2,012	2,291	165	15	65	60	4	2
New Mexico	576	271	169	49	0	8	8	†	†
New York	15,843	6,148	5,594	1,131	127	325	226	7	92
North Carolina	1,339	694	311	113	10	16	14	2	†
North Dakota	445	208	184	130	1	6	6	†	0
Ohio	7,060	2,889	2,777	443	10	91	64	20	7
Oklahoma	2,522	1,255	690	184	14	18	16	1	†
Oregon	2,087	873	885	77	0	11	10	1	0
Pennsylvania	10,543	4,067	4,809	1,161	6	156	92	49	15
Rhode Island	587	192	306	39	0	8	4	3	1
South Carolina	787	483	122	26	1	9	7	1	1
South Dakota	497	219	189	119	0	9	8	†	†
Tennessee	2,815	1,089	920	294	11	33	25	1	7
Texas	11,174	5,329	2,973	1,134	115	117	104	9	4
Utah	544	209	248	35	2	4	4	0	0
Vermont	234	75	137	6	0	2	2	†	†
Virginia	2,393	1,034	962	90	3	22	16	5	1
Washington	2,882	1,324	1,088	57	16	37	25	6	6
West Virginia	806	357	305	25	0	9	7	1	†
Wisconsin	2,337	975	934	278	1	31	30	†	†
Wyoming	338	138	128	21	1	3	2	†	†
Virgin Islands	23	6	10	0	0	†	†	0	0
D. C. all*	1,939	1,144	587	110	0	10	10	†	†

* Includes national and nonnational commercial banks in the District of Columbia, all of which are supervised by the Comptroller of the Currency.

† Less than $500,000.

‡ Reserve for loan losses under internal Revenue Code.

§ Valuation reserves on securities.

Note: Data may not add to totals because of rounding.

Table 3.—Capital accounts of national banks, by states, September 30, 1963

(Dollar amounts in millions)

State	Total capital funds	Debentures	Preferred stock	Common stock	Surplus	Undivided profits	Reserves
United States	$13,334	†	$25	$3,906	$6,585	$2,524	$294
Alabama	166	0	0	50	72	34	10
Alaska	12	0	0	5	4	3	1
Arizona	89	0	0	24	46	16	3
Arkansas	74	0	0	23	31	18	3
California	1,522	0	0	422	790	299	10
Colorado	159	0	0	53	70	35	1
Connecticut	124	0	0	37	64	22	1
Delaware	2	0	0	1	1	†	†
Dist. of Col.	87	0	0	24	47	12	4
Florida	346	0	†	130	159	45	11
Georgia	176	0	0	44	82	31	19
Hawaii	30	0	0	9	14	6	2
Idaho	44	0	0	14	19	8	2
Illinois	1,308	0	0	450	620	181	57
Indiana	307	0	0	78	153	68	8
Iowa	104	0	0	26	46	31	2
Kansas	154	0	1	45	68	38	2
Kentucky	116	0	0	28	59	26	2
Louisiana	198	0	0	46	107	45	†
Maine	40	0	0	15	15	10	1
Maryland	134	0	0	35	74	20	6
Massachusetts	455	0	0	112	255	69	19
Michigan	429	0	3	119	216	83	9
Minnesota	296	0	0	85	140	66	5
Mississippi	41	0	0	11	27	4	†
Missouri	232	0	0	70	100	55	8
Montana	39	0	0	14	15	10	†
Nebraska	128	0	0	38	53	34	4
Nevada	30	0	0	15	13	3	†
New Hampshire	40	0	0	8	21	10	1
New Jersey	402	0	†	121	199	74	9
New Mexico	46	0	0	16	16	6	7
New York	1,396	0	20	418	690	259	9
North Carolina	119	0	0	34	66	17	1
North Dakota	34	0	0	11	14	8	†
Ohio	633	0	0	185	331	114	4
Oklahoma	265	0	0	71	104	86	4
Oregon	167	0	0	51	62	54	†
Pennsylvania	1,111	0	†	265	657	179	10
Rhode Island	50	0	0	14	26	10	†
South Carolina	68	0	0	16	38	12	1
South Dakota	39	0	0	13	16	10	†
Tennessee	237	†	0	67	123	42	5
Texas	1,033	0	0	363	455	183	31
Utah	48	0	0	13	23	9	2
Vermont	22	0	1	7	9	5	1
Virginia	229	0	0	65	122	39	3
Washington	237	†	0	67	123	42	5
West Virginia	88	0	0	21	43	20	4
Wisconsin	192	0	0	48	91	46	7
Wyoming	30	0	0	5	16	9	1
Virgin Islands	2	0	0	*	1	*	0
D. C.—all*	150	0	0	39	81	24	6

* Includes national and nonnational commercial banks in the District of Columbia, all of which are supervised by the Comptroller of the Currency.

† Less than $500,000.

Note: Data may not add to totals because of rounding.

Table 4.—Status of applications for national bank charters as of September 30, 1963 and charters issued July 1—September 30, 1963

Applications carried over from June 30, 1963	139
3—Conversion	
136—Primary	
139	
Applications received July 1, 1963 to September 30, 1963	139
7—Conversion	
132—Primary	
139	
	278
Applications approved July 1, 1963 to September 30, 1963	76
9—Conversion	
67—Primary	
76	
Applications rejected July 1, 1963 to September 30, 1963	64
All Primary	
Applications abandoned July 1, 1963 to September 30, 1963	20
All Primary	
Applications pending as of September 30, 1963	118
	278
1—Conversion	
117—Primary	
118	
New national banks chartered July 1 to September 30, 1963	60

Table 5.—De Novo branch applications of national banks, by states, July 1 through September 30, 1963: received, approved, abandoned, and pending as of September 30, 1963

State	Received*	Approved	Rejected	Abandoned	Pending 9-30-63
United States	307	169	23	8	107
Alabama	7	4	0	0	3
Alaska	3	3	0	0	0
Arizona	4	0	0	0	4
Arkansas	3	2	0	0	1
California	50	23	11	2	14
Colorado	0	0	0	0	0
Connecticut	8	4	0	1	3
Delaware	0	0	0	0	0
District of Columbia	3	1	0	0	2
Florida	0	0	0	0	0
Georgia	2	2	0	0	0
Hawaii	0	0	0	0	0
Idaho	0	0	0	0	0
Illinois	0	0	0	0	0
Indiana	9	6	0	0	3
Iowa	5	4	0	0	1
Kansas	1	0	0	0	1
Kentucky	5	4	0	0	1
Louisiana	5	1	0	0	4
Maine	0	0	0	0	0
Maryland	4	3	1	0	0
Massachusetts	10	3	1	0	6
Michigan	24	11	1	0	12
Minnesota	0	0	0	0	0
Mississippi	1	1	0	0	0
Missouri	3	1	0	0	2
Montana	0	0	0	0	0
Nebraska	0	0	0	0	0
Nevada	2	1	0	1	0
New Hampshire	3	3	0	0	0
New Jersey	11	4	0	4	3
New Mexico	2	1	0	0	1
New York	35	19	1	0	15
North Carolina	14	13	0	0	1
North Dakota	0	0	0	0	0
Ohio	16	10	1	0	5
Oklahoma	1	1	0	0	0
Oregon	9	7	1	0	1
Pennsylvania	27	14	3	0	10
Rhode Island	0	0	0	0	0
South Carolina	7	5	0	0	2
South Dakota	0	0	0	0	0
Tennessee	3	3	0	0	0
Texas	0	0	0	0	0
Utah	0	0	0	0	0
Vermont	2	0	0	0	2
Virginia	18	10	2	0	6
Washington	9	4	1	0	4
West Virginia	0	0	0	0	0
Wisconsin	1	1	0	0	0
Wyoming	0	0	0	0	0

* Includes applications pending as of the end of June 1963.

Table 6.—Branches of national banks: in operation June 28, 1963, opened for business, discontinued or conslidated, July 1—September 30, 1963, and branches in operation September 30, 1963

State	Branches in operation 6-28-63	Branches opened for business, 7-1—9-30-63	Existing branches discontinued or consolidated 7-1—9-30-63	Branches in operation 9-30-63
United States	6,776	127	6	6,897
Alabama	86	2	0	88
Alaska	25	3	0	28
Arizona	147	0	0	147
Arkansas	32	1	0	33
California	1,486	11	0	1,497
Colorado	0	0	0	0
Connecticut	122	3	0	125
Delaware	2	0	0	2
District of Columbia	69	0	0	69
Florida	0	0	0	0
Georgia	92	0	0	92
Hawaii	38	0	0	38
Idaho	80	0	0	80
Illinois	0	0	0	0
Indiana	204	4	0	208
Iowa	14	2	0	16
Kansas	23	0	0	23
Kentucky	98	0	0	98
Louisiana	108	0	0	108
Maine	56	0	0	56
Maryland	146	2	6	142
Massachusetts	258	0	0	258
Michigan	281	5	0	286
Minnesota	6	0	0	6
Mississippi	33	1	0	34
Missouri	11	1	0	12
Montana	0	0	0	0
Nebraska	15	0	0	15
Nevada	27	0	0	27
New Hampshire	1	0	0	1
New Jersey	326	3	0	329
New Mexico	34	0	0	34
New York	645	11	0	656
North Carolina	185	37	0	222
North Dakota	4	0	0	4
Ohio	398	4	0	402
Oklahoma	19	1	0	20
Oregon	179	1	0	180
Pennsylvania	583	9	0	592
Rhode Island	51	0	0	51
South Carolina	125	8	0	133
South Dakota	34	0	0	34
Tennessee	149	2	0	151
Texas	0	0	0	0
Utah	44	0	0	44
Vermont	19	1	0	20
Virginia	209	13	0	222
Washington	288	2	0	290
West Virginia	0	0	0	0
Wisconsin	22	0	0	22
Wyoming	0	0	0	0
Virgin Islands	2	0	0	2

Table 7.—Branches of national banks authorized, July 1—September 30, 1963, by community size and size of bank

In cities with population:	
less than 5,000	60
5,000— 24,900	78
25,000— 49,900	24
50,000— 99,900	21
100,000— 249,900	24
250,000— 499,900	12
500,000—1,000,000	11
over 1,000,000	9
TOTAL	239
By banks with total resources (In millions of dollars)	
Less than $ 9.9	24
10.0 to 24.9	27
25.0 to 49.9	25
50.0 to 99.9	25
100.0 to 999.9	104
over 1,000	34
TOTAL	239

Table 8.—Mergers, July 1—September 30, 1963*

Applications pending as of July 1, 1963	27
Applications received, July 1—September 30, 1963	27
Disposition of applications: July 1—September 30, 1963:	
Approved	33
Pending: September 30, 1963	21
Transactions completed—Total	29
Mergers	23
Consolidations	5
Purchase and sale transactions	1

The aggregate total of capital stock and capital accounts for the certificates issued are as follows:

	Charter or purchasing bank	Merg., Consol. or selling bank	Combined
Capital stock	$105,679,270	$ 8,235,500	$128,008,895
Capital accounts	420,020,220	30,766,422	450,146,325

*Includes mergers, consolidations and purchase and sale transactions, involving national banks.

BOOK REVIEWS

Management Policies for Commercial Banks. By HOWARD D. CROSSE. New York: Prentice-Hall, Inc., 1962. Pp. ix + 310. $9.25.

"This book attempts to examine the whole spectrum of commercial bank policy formation and to relate practice to theory," Mr. Crosse states boldly in his preface, and his attempt has succeeded admirably. Similar efforts have been made by others, perhaps more gifted as authors, but none have been able to delve into the heart of commercial banking and explore it as thoroughly and unhurriedly as Mr. Crosse has done.

Writing from the vantage point of thirty years' experience with the Federal Reserve Bank of New York as bank examiner, operating officer and currently Vice President in charge of Bank supervision, the author has viewed at close range the policies and operations of large banks and small banks, some well run and others poorly managed, in times both good and bad. Thus he is eminently qualified to devote close to 300 pages to management principles which bank directors and those aspiring to bank executive positions will find invaluable.

This book is not one to be read and digested in one or even several sittings. A careful perusal of one or two chapters at a time, followed by discussions with knowledgeable bankers, should not only further understanding of the principles expressed but will, I believe, whet the appetite of the reader for more of the same.

While commencing quite innocuously with a discussion of commercial banking functions, the author plunges deeply into several controversial areas of banking in the second chapter. In a few pages he handles nicely the delicate subject of the existence, side by side, of banks chartered by the Federal Government and by the fifty states as well—the so-called dual banking system. Mr. Crosse then delves into the question of unit banks versus branch banking and in a well documented discussion runs the gamut of the merger trend, "de novo" branch banking, group banking and holding company banking. With his background Mr. Crosse is well qualified to treat of these topics, and this chapter is "must" reading for students of banking and practical bankers alike.

The author's exposé in Chapter IV of risks inherent in banking may well startle investors in bank stocks. Unfortunately, the chapter following on bank earnings does little to allay the investor's fears. However, it does chart the path which management must follow in its efforts to increase income, control expenses, determine the profitability of its operations and project the future. "A budget is more than a simple forecast of income and expense," says Mr. Crosse. "It is a pattern to follow, a measure against which performance may be judged, a set of goals that an organization may strive to exceed."

Those bankers who in the early 1930's were faced with the almost insurmountable problems caused by frozen assets might well be inclined toward overcautiousness in providing for liquidity. Conversely, the younger element in bank management, unmindful of past history, may consider such a situation somewhat remote in the light of present day monetary controls, and may therefore disdain serious consideration of liquidity requirements. To both types of banker, in fact to everyone who wishes to be classified as a banker, the two chapters which Mr. Crosse devotes to liquidity concepts, instruments and procedures are sharp, up-to-date and crystal clear in their implications. Since the Federal Reserve-Treasury accord of 1951, the patterns of banking have been changing rapidly and frequently. Certainly, the staid and conservative country banker will be dismayed when the author recommends that his bank borrow money by the purchase of "Federal funds" rather than by carrying a comfortable excess in his Federal Reserve account to compensate for day-to-day deposit and loan fluctuations.

The chapter concerning Capital Adequacy, while technically correct and accurate in its thorough review of the bases utilized by various supervisory authorities, might be criticized for being too technical in its approach. This portion of the book would

have been more readable if the various types of analyses were detailed in an appendix rather than as part of the text.

The chapters on Lending Policies and Lending Practices are without question the high spot of this volume. While the principles and procedures are neither new nor unique, the sharp and clear exposition will benefit bank director, officer and layman, alike. Of particular interest is the author's caution against the making of loans by directors of the bank, a prerogative justly reserved to active officers who "should not be permitted to engage in outside business activities which might in any way conflict with their banking responsibilities." The section in which Mr. Crosse makes a plea for aggressive loan development and, where necessary, "promotional lending" covers an aspect which has long been neglected in many banks.

While some might find the chapter on Portfolio Policy somewhat exaggerated in its intensity, it clearly and unmistakably points out the necessity of having a well-trained specialist responsible for maintaining the bank's investment account. With the fluctuations in the levels of prices and interest rates which have been part of business and credit cycles during the past dozen years and with income tax considerations so vital in the management of a portfolio, the author makes it eminently clear that even a moderate sized bank cannot afford the luxury of a part-time portfolio officer.

The concluding chapters on Personnel Policies and Community Relations make for easier reading and will be of particular interest to directors who accept responsibilities in these areas when they agree to become members of the board. No quarrel can be found with Mr. Crosse's premises and the reader might well desire further amplification of both these topics.

While this volume is more up-to-date in its approach than most recent treatments of the subject, certain anachronisms are already apparent—an indication, one must conclude, of the dynamism of banking. The author, for example, cautions against payment of stock dividends on a regular basis as being frowned upon by supervisory authorities, but the Comptroller of the Currency has within the past year ruled that such dividends can be paid more or less regularly. Other regulatory changes of which the volume does not take account include authority for national banks to issue preferred stock and capital debentures, the classification of Federal funds transactions as purchases and sales rather than borrowings and lendings, and a revised formula for capital adequacy and new investment regulations.

The principal void in this volume is the absence of any real discussion of the Trust function as an activity of commercial banks. It would seem that some reference should have been made to this facet of banking, as well as to the problems of automation, foreign banking departments, municipal bond trading departments and emergency preparedness. But here we are suggesting what might well be a second volume and I, for one, feel very strongly that Mr. Crosse could profitably cover these and other topics which are of increasing importance to banks today.

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In Search of a Monetary Constitution. Edited by Leland B. Yeager. Cambridge, Massachusetts: Harvard University Press, 1962. Pp. 376. $7.50.

In Search of a Monetary Constitution contains the lectures (essays, really) of the eleven distinguished individuals—businessmen, professors and a government official—who during 1960 participated in a lecture series on monetary reform sponsored by the Thomas Jefferson Center for Studies in Political Economy, University of Virginia. It also contains a valuable introductory essay by Leland Yeager, editor of the volume and a member of the University of Virginia's economics faculty.

As I indicated, the theme of the Center's lecture series was monetary reform, and nine of the invited lecturers were given the task of critically appraising present-day monetary arrangements (laws) and, where appropriate, making suggestions for change. The two remaining guest lecturers, Clarence Philbrook and Clark Warburton, were given the task of providing "a background for the reform proposals of the others." Thus, Warburton offers a historical narrative, "Mone-

tary Disturbances and Business Fluctuations in Two Centuries of American History," in which he attempts to invest the money supply with an overriding practical importance, and, more specifically, show that "monetary disturbances have been a basic factor in bringing about our depressions and our inflations" (p. 92). Philbrook offers a theoretical discussion of the role of money, "Money in a Neo-classical Perspective," in which he also attempts to show, at least by implication, how important the money supply is for economic stability. He records some well-known criticisms of early Keynesian models and goes on to argue that contemporary monetary theorists are, when correct, simply restating what was obvious to classical economists. All of which I found very tiresome. It should also be noted that Philbrook's essay will probably prove too difficult for readers who do not come to it with a relatively good grasp of monetary theory. Warburton's essay should benefit most readers, however, perhaps all except those who are themselves expert in U.S. monetary history. It is one-sided, to be sure; but then, 200 years of history, if known in detail, aren't easily fitted into one lecture and some 30 pages. Moreover, the fact that Warburton's conclusion—the U.S. would be better off with a non-discretionary monetary policy—is largely a *non sequitur* doesn't make his essay less valuable. A single dangling sentence isn't much of a blemish, coming as it does at the very end of the essay. Besides, he has argued this conclusion elsewhere.

After the background pieces by Philbrook and Warburton come four commodity money proposals. In his "The Commodity-Reserve Currency Proposal Reconsidered," Benjamin Graham gives an up-to-date defense of his own plan—first put forward in *Storage and Stability,* which was published in 1933—for "stabilizing the market value of a composite group of important, storable raw materials" (p. 184) and, incidentally, for providing a commodity-backed currency. Arthur Kemp, author of "The Gold Standard: A Reappraisal," pleads, however, for a return to gold-backed coins. His arguments are mostly political; turning the clock back would, he says, result in a more stable price level, but his basic point is that a gold coin standard protects individuals from their governments.

Kemp, although evidently quite sure that he knows what freedom means, is nevertheless moderate in his claims for gold coins. Murray Rothbard, another proponent of the gold standard, is anything but moderate in the claims he has put into "The Case for a 100 Percent Gold Dollar." He stridently demands that the U.S. go over, not just to a gold standard, but to a *pure* gold standard such as probably never has been used. Actually, his essay reads like a religious work, complete with references to sacred books—in this instance, those authored by von Mises. But fortunately for the reader, it contains some wondrous thoughts, as for example: "Ultimately the issue is a stark one: we can either return to gold or we can pursue the fiat path and return to barter. It is perhaps not hyperbole to say that civilization itself is at stake in our decision" (p. 127). Or again, attacking those who like Milton Friedman advocate a perfectly constant growth rate for the money supply, he writes: "These economists have not fully absorbed the great monetary lesson of classical economics: the supply of money essentially does not matter" (p. 121). Which straight away puts a number of us out of business.

"Predictability: the Criterion of Monetary Constitutions," by James Buchanan, is the last of the commodity money essays. Buchanan is at least as much concerned, however, with how to pick a constitution as with which one to pick. His criterion, as the title of his essay makes clear enough, is predictability of the price level. We should hunt, if we want to follow his advice, for that monetary constitution which maximizes our ability to predict, not to stabilize, the price level. And of course Buchanan is entirely right in pointing out that insofar as the efficiency of individual economic units is concerned, how the price level behaves is less important than whether it behaves as expected. Even so, I'm not convinced that he has, in offering his alternative criterion, made the search for a monetary constitution have to be identical. (I noted with some interest when reading Buchanan's essay that he seems to make no use of his distinction between predictability and stability in arguing for a common brick rather than, say, a gold standard, of which he, unlike Kemp and Rothbard, is highly skeptical.)

Among those who distrust governments (even democratically elected ones, apparently, when it comes to managing the money supply) and independent central banks, there are those, however, who are opposed both to gold and to common bricks. Milton Friedman, who has contributed "Should There be an Independent Monetary Authority?" to the present volume, is such an individual. Gold, as he maintains in his essay, is too expensive and, in any event, it is no longer believed in. But fiat money, if "supplied" by an independent central bank, is no good either. No, the supply of fiat money has to change in accordance with some predetermined rule. And as those who have read Friedman's second last book, *A Program For Monetary Stability*, will recall, he has a rule he favors; the money supply should increase each day at the rate of X percent per year (where X is some number between 3 and 5).

The case Friedman makes for his rule in "Should There be an Independent Monetary Authority" is not quite the same one he made in *A Program For Monetary Stability*. There he argued that the monetary authority, being unsure of the lag with which its actions influence the economy, is likely, unless bound by a rule of the sort he advocates, to be a source of economic instability. Here he argues that having an independent monetary authority is unwise, but for reasons which would be valid even if the lag of monetary policy were identically zero months. More in the manner of the political scientist than the economist, he maintains that the independent monetary authority is too much influenced by the views of bankers and too dependent on the personalities of those officials and advisers who make policy. But *A Program For Monetary Stability* is reviewed, along with the writings of others (Warburton, Bronfenbrenner, Shaw and Angell) who advocate Friedman-type rules, in Richard Selden's "Stable Monetary Growth," which is a relatively inclusive, if a decidedly uncritical, summary of the contemporary case for nondiscretionary monetary policy. And a case for the defense (not necessarily the one the Federal Reserve System would make) can be found in Jacob Viner's paper, "The Necessary and the Desirable Range of Discretion to be Allowed to a Monetary Authority." Of the several points Viner makes, one is particularly worth reporting here (for Selden's benefit); it is that Friedman-type rules, being in a manner of speaking one-dimensional, may not serve a monetary authority with a number of goals in mind very well. (Selden argues, quite incorrectly I think, that adoption of a Friedman-type rule doesn't require adoption of flexible exchange rates.)

Of the two essays unmentioned so far, one, "Sound Money—Why Needed and How Obtainable," by Willford King, cannot be recommended for reading. The other, George Tolley's "100 Percent Reserve Banking," should certainly be read; it is a noteworthy, interesting contribution to a rather dull body of literature. Tolley suggests, among other things, that commercial banks turn their demand deposit liabilities over to the Reserve Banks and continue as administrators of the checking system only as System agents. They can of course remain in the business of lending, but as financial intermediaries.

Now, although having explained at least briefly what *In Search of a Monetary Constitution* contains, I should, I suppose, as a responsible reviewer offer some kind of judgment about the book's worth. Mine, I'm afraid, is a seemingly harsh one, for I cannot see that it contains much, whether in the field of economics or in the field of political science, that will interest serious students of monetary policy. Much of what its contributors have to say has been said before.

But if serious students of monetary policy—or better, serious students who are not entirely ignorant of political theory and history—should feel no compulsion to read this volume, perhaps teachers of undergraduate economics should. They may find it worthwhile for the classroom (which presumably is where it was born). Better discussions of commodity standards than are contained herein are available. Yet, Tolley's essay contains an excellent summary of the issues involved in the "100 percent reserves" controversy. And the essays by Friedman, Viner and Selden, taken together, give a good summary of the current debate about discretionary monetary policy.

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The Composition of Consumer Savings Portfolios. Studies in consumer savings, no. 3. By HENRY J. CLAYCAMP. Urbana: Bureau of Economic and Business Research, University of Illinois, 1963. Pp. x + 99.

With the growth of the newer forms of saving—pension plans, mutual funds, and others—economic research has given increasing attention to the preferences individuals have for different assets. The following three questions are of particular interest. (1) Do savers treat certain assets as substitutes or complements? (2) Can identifiable economic or psychological factors explain the asset preferences of different households? (3) Do people who expect inflation keep relatively more of their savings in assets not fixed in dollar value like common stocks? Claycamp's study concerns these three questions.

He made a cross-sectional analysis of the portfolios of 405 sample households during the spring of 1960 in two metropolitan areas (not disclosed). The sample was intentionally overweighted with well-to-do households. The information, collected by personal interviews, was unusually detailed.

The distributions of various kinds of assets among these households were approximately independent. The likelihood of a household owning (any amount of) one kind of asset, as, for example, bonds, did not depend on whether it had life insurance, a savings account, or any other kind of asset. This implies that if 80 percent (say) of a population group has life insurance, and 60 percent (say) savings accounts, approximately 48 percent (80x60) will have both, by the probability of the joint occurrence of two independent events. Apparently the reasons for holding particular assets are numerous and vary widely among households, so that the population has varied preferences and very few common patterns of asset ownership.

The cross distributions of ownership were computed for thirteen general groups of assets: checking account, life insurance, pension plan, savings account, government bonds, other bonds, annuities, stocks, equity in own home, other real estate, loans lent, a business, and (one all-inclusive "negative" asset) debts lasting over 30 days. The finding of independence pertains to these groups. Obviously, if groups were defined in more and more detail, evidence of substitutions would probably show up. While the ownership of savings and checking accounts appear to be independent, accounts in two or more banks are likely to be substitutes. Most of us have an account in just one bank, unless there is some special reason for having multiple accounts. Similarly, the bonds and stocks of different companies are substitutes or complements for one another depending on their characteristics and on whether we seek diversification, growth, or high yields. Nevertheless, the asset groups used here are fairly detailed, and their independence in the sample is revealing about consumers' behavior. An analysis of dollar amounts held by the households in the different asset groups also showed approximate independence.

The few pairs of asset groups that did show a statistically significant degree of substitutability or complementarity had simple explanations. Owners of businesses were less likely to be covered by pension plans; owners of stocks were more likely to have checking accounts and bonds. While most other pairs were approximately independent by tests of statistical significance, they were overall slightly complementary with each other, apparently because of the high-wealth households. The rich hold their wealth in many different kinds of assets, rather than all in one form—hence the slight tendency for the ownership of different holdings to be positively related in the sample.

The study also looked at the fraction of total wealth held in assets of fixed value like bonds or savings deposits as opposed to real estate or common stocks. The results here were in line with other published studies. The main effect was traced to home ownership, which reduced the fraction of fixed-value assets in the total. But home ownership did not have any clear-cut effect on the remainder of the portfolio other than what could be attributed to differences in total wealth. In particular, home owners did not appear to treat mortgage payments as a substitute for other forms of saving. Higher wealth itself produced a lower fraction of fixed-value assets.

Attempts to relate the fixed-value fraction to socio-economic variables was largely unsuccessful. Age was positively related for homeowners and high-wealth households,

but income, number of dependents, occupation, education, expectations of inflation or recession, stated motives for saving, and personality had little or no effect on the fraction, if the effects of homeownership and total wealth were held constant. Such factors may have an effect, but it did not stand out in these survey data. As I interpret the results, most young households start accumulating wealth in one or more liquid assets like checking or savings accounts; they probably acquire some life insurance, and perhaps a home. As their wealth increases, they add on to these and acquire a variety of other assets. Thus far, studies of consumer portfolios have not been able to identify other significant patterns of ownership. Since this study was conducted with commendable care and originality, its lack of success in finding strong effects of socio-economic variables tentatively casts doubt on their overall importance in explaining asset preferences.

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Money, Prices and Policy. By WALTER W. HAINES. New York: McGraw-Hill, 1961. Pp. xvii + 780. $7.95.

This introductory text is a thorough presentation of the usual elements covered in a money and banking course. The book is divided into ten parts, beginning with the standard institutional chapters on Money and Its Development and Commercial Banking. These chapters discuss the familiar figures of Joe Smith, the original goldsmith and banker, John Law, Nicholas Biddle, and the eras of the National Banks, wildcat banking, and the establishment of the Federal Reserve System. The next part of the text, Central Banking, considers the Federal Reserve System in ample detail. The tools of the Fed for directing monetary policy are discussed at this point, although a critique of these tools is postponed until later in the book. To complete the first half of the text, sections on Financial Intermediaries and Monetary Systems are presented. This latter part includes chapters on monetary standards and on the monetary systems of the United States, Great Britain, Canada, France, the Soviet Union, and India.

The second half of *Money, Prices and Policy* is devoted to monetary theory and policy. Monetary theory is considered first; this part of the text (Part VI) begins with an extensive discussion of price indices. Various types of indices, such as the Marshall-Edgeworth and Fisher's Ideal Index are discussed in an appendix. Theories of the value of money are also considered, including the commodity theory, the state theory, and the quantity theory. Although not a theory, the equation of exchange is also discussed in this chapter. The equation of exchange is developed further in the following chapter, and the theory of liquidity preference is added to the analysis. The familiar Keynesian motives for holding cash balances are discussed at this point.

Part VII of the text, entitled National Income Theory, represents an attempt by the author to present elementary aggregative economics in a different manner than is found in most widely-used introductory economics texts. In particular, the author states in the preface that "I have used a pictorial rather than an algebraic presentation . . . for experience shows that this is easier for the student to grasp. . . ." The pictorial approach, in this case, substitutes diagrams consisting of national income terms connected by arrows, for the more usual aggregate demand and supply graphs. This method has the advantage of outlining the circular flow of the economy more clearly, although the explicit nature of the consumption (and savings) functions is not as obvious.

In a subsequent chapter, entitled The Role of Expectations, the author does elementary economics a service by defining clearly and stressing the importance of the terms *ex ante* and *ex post*. This permits, among other things, a concise statement of the paradox of thrift: "if *ex ante* saving exceeds *ex ante* investment, national income will fall," (p. 491). The use of the terms *ex ante* and *ex post* is then combined with the development of the circular flow method accomplished in an earlier chapter, in order to discuss the spiralling patterns of business cycles.

Another interesting development in Part VII is a chapter devoted to the flow of funds data. Since this data has only recently appeared, several recent tables are reproduced and their meaning and use is discussed. The

identity of *ex post* investment and saving is further stressed with the use of this method. The debt to Morris Copeland is recognized and his "discretionary thesis" is discussed. Further theoretical implications of this use of the data are not explored, since "the technique is still very much in its infancy (and) the theoretical implications of the material are not very well developed." (P. 516.)

Part VIII, Monetary Policy, first discusses the aims of maximum production, full employment, and stable prices, and the compatibility of these goals. The author then turns to the development of Federal Reserve policy and its present actions, in order to explore the effectiveness of its policies in the past. In the two following chapters, the author offers a critique of the bases and tools of monetary policy. "Crackpot schemes," such as those presented by Major Douglas and others before and during the Great Depression, are appropriately exposed and disposed of. This section is followed by a discussion of the usual tools of the Fed, such as open market operations, changes in the discount rate, changes in the reserve ratio, and direct controls. While the use of the first three tools is generally accepted, the author feels that the consensus on the last is "not clear, and . . . promises to provide materials for debate for some time to come." (P. 634.) Although not part of monetary policy, fiscal policy is also discussed in this part of the text. After automatic stabilizers have been mentioned, the importance of debt management is more fully discussed.

Although this text is in general well organized and well presented, there are a few sections where the reviewer disagrees with the approach used by the author. For example, the author is quite outspoken on the evils of inflation. The reader is told that individuals who put money in fixed dollar investments are "defrauded by inflation" (p. 375). Also, its "insidious" nature "should not blind us to its disastrous results" (p. 557). Some of these results are that, "Inflation robs the saver. . . . Inflation feeds on itself. . . . Inflation can demoralize production. . . . Inflation leads to depression." Also (p. 560), "I believe that the appeal of inflation as a cure for our ills is a siren song, luring us to destruction of the sound base of our productive capacity." The author is not only talking about runaway inflation in these quotes. "At 3 percent per year prices will double in 24 years, quadruple in 48 years. . . . This is not an insignificant change." (P. 552.) Many noted economists, including the late Sumner Slichter, believe that a little inflation is a good thing. In a general textbook it is not necessary to remain neutral on such items as the effects of inflation, but arguments of the other side should at least be acknowledged. However, minor lapses such as these should not detract from a generally useful textbook.

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Money, Trade and Economic Growth. By HARRY G. JOHNSON. Cambridge, Mass.: Harvard University Press, 1962. Pp. 199. $4.50.

Three topics are covered in this volume: developments in international trade theory; the present state of the Keynesian debate; and the impact upon economic theory and policy of the fact that advanced societies are "affluent" and, when functioning normally, grow. The purpose of the essays is expository, to delineate the present state of the art; however, in general, the papers are not dull academic exercises typical of review articles, for the exposition is leavened by Professor Johnson's perceptive comments both on unsettled issues and on the true nature of the problems under examination.

Three elements unify these essays: an emphasis upon economic policy; the general theory of the second best (which is a theorem of welfare economics that is directly related to economic policy analysis); and the proposition that much of economics can best be looked at as special problems in capital theory.

The emphasis upon and interest in economic policy is evident not only in the choice of subject matter, but also in the way in which problems are stated. For example, Johnson identifies the developments in balance of trade theory during the past twenty years as a change ". . . from the idea of a mechanism of adjustment to the idea of the balance of payments as a policy problem" so that the analytical problem has become the study of ". . . alternative ways of rectify-

ing the balance of payments disequilibrium." The paper on the balance of payments not only shows the progress that has been made in the recent past, it also makes evident the weakness of the tools with which analytical economists approach balance of payments problems, such as the United States is now experiencing. The material in the tool-box treats balance of payments problems as income-expenditure-trade rather than as financial-portfolio-investment problems. The American balance of payments problem is a liquidity problem, arising out of lending and investing long and financing a part of this long investment either by borrowing short or by decreasing cash balances. The adjustment mechanism and policy choices affect both trade and financial variables, but the analytical mechanism as presented by Johnson runs entirely in trade terms. Hence it is of limited usefulness for the analysis of the current policy problem.

The essays on commercial policy and customs unions center around the well known second-best theorem which can be stated as follows: If at least one of the conditions for maximum welfare cannot be obtained then there is a presumption that the achievement of maximum attainable welfare will require violations of other conditions of maximum welfare. Three important propositions dealing with customs unions and commercial policy are developed: (1) That if two countries are alike but can become complementary specialists there is a large potential gain from economic unification; (2) That the freeing of trade between two countries may generate losses if it leads to sufficient trade diversion; and (3) that the fundamental problem of a customs union is the determination of the height and pattern of the common tariff. This last proposition is, of course, the core of the policy problems now dividing the common market countries and the United States. An implication of the analysis is that the benefits to the common market countries of the common market is inversely related to the height of their external tariff.

A proposition to the effect that the benefits from freeing trade depends upon the extent that it is multilateral rather than discriminatory seems to be implicit in the argument. If this is true, then the interwar pattern of commercial policy, embodied in the reciprocal trade acts, was more beneficial than is the postwar pattern, in which trading blocs and customs unions are looked upon with favor.

The two essays dealing with monetary theory state the issues in the Keynes-Classics controversy and indicate some of the progress that has been made. Johnson perceptively points out that the underemployment equilibrium of Keynes is really not an equilibrium; rather, it is a representation of a dynamic process among markets with widely differing rates of adjustment, some of which are much too slow for practical purposes. He also argues that Keynesian economics would be improved if consumer demand and portfolio choices were analyzed as special capital problems. Aside from the fact that the Keynesian treatment of money as an asset is a capital theoretic view of money, Johnson neglects the view, embodied in the user costs doctrine, that the present value of future returns determines present supply. As Johnson views labor as a heterogeneous embodiment of investment in his essays on an opulent society, it should be noted that a consistent capital theoretic view of labor supply, as reflecting present value of future services, can lead to the Keynesian supply curve of labor.

The last two essays in this volume deal with the opulent (affluent) society. They are first rate; they are the best statement I have encountered of the analytical and policy issues brought forth by the fact of affluence. Johnson's economic analysis of an opulent society is based upon ". . . the role of capital in two contexts—consumption and the nature of labor," and the economic policy suggestions are based upon a recognition that the risks of labor rises as labor increasingly becomes differentiated due to the needs of technology and the increased investment in humans. As the opulent society grows when it is functioning well, and as its growth is mainly due to change rather than to accumulation, each laborer must carry risks of becoming technologically obsolete. The combination of risk aversion, as a characteristic of preference systems, and ever-increasing risks, due to the nature of the accelerating technical dynamism, implies that there is a large payoff in welfare from broad social insurance and expansion schemes. In addition, the way in which opulence and urbanism are related implies that an ever-expand-

ing set of economically significant external benefits and costs exists. From these two sources, risk and externalities, Johnson draws powerful arguments for intervention by way of welfare measures as well as by the provision of services.

To summarize, this is a collection of important and provocative essays which should be of use to students, professional economists and educated laymen.

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Problems of the United States as World Trader and Banker. By HAL B. LARY. New York: National Bureau of Economic Research, 1963. Pp. xvi + 175. $4.50.

This study serves a number of useful purposes: It provides a review of the U. S. balance of payments since 1950; it presents alternative methods of measuring balance of payments deficits and surpluses; it examines explanations for the appearance of the deficit and evaluates policies which have been suggested in the current literature. Last, the book serves as the preliminary statement of a research program which the National Bureau has undertaken in this area. In light of this program, Mr. Lary emphasizes the preliminary nature of his findings, particularly in those chapters which deal with economic analysis and policy. The reader is inclined to agree and feels that the most successful parts of the book are those dealing with the measurement of deficits and surpluses. Included in the appendix are very useful comments on alternative presentations of the balance, suggested in the writings of Walter Gardner and Robert Triffin.

The author's main finding concerns the method of presenting surpluses and deficits currently employed by the Commerce Department. He writes:

> The most distinctive and debatable feature of the Commerce Department practice is the difference in treatment accorded American private short term capital compared with that given to foreign private short term capital, movements in the former being entered above the line and movements in the latter below. This practice has been criticized as asymmetrical, . . . if universalized it would lead to mutually inconsistent results in that, in a time of generally rising international financial transactions, several financial centers might simultaneously record an increase in foreign private claims on them without reporting any offsetting assets. (Pp. 144-145).

The author presents for comparison three measures of the balance of payments: (1) a balance on basic transactions, comprising exports and imports of goods and services, government grants and capital, and private long-term investment; (2) a balance on the Commerce Department's definition; and (3) a balance on Official Settlements Basis which shows the sum of gold movements and changes in official holdings of foreign exchange. Depending upon the problem, the author would choose balance 1 or 3 in preference to 2. At one point (p. 148), Lary suggests that the balance below the line might include all transactions sensitive in the short run to monetary policy, in which case the appropriate balance is that on basic transactions. The importance and usefulness of these distinctions becomes clear in Lary's skillful discussion of our recent experience. For matters may deteriorate under one definition and improve under another.

The author is much more conjectural in explaining the deficit and prescribing its cure. He comments wisely on the danger of overexplaining changes in the balance but leaves the reader in the dark as to which explanations he feels are valid. This omission weakens his treatment of balance of payments policy. For if the persistent deficit is an indication that our economic system is not working properly, the formation of policy requires that we know why the deficit has occurred and how it may be eliminated. In this regard the reader is hampered by the absence of any concept of a long-run equilibrium or a long-run process of adjustment to disturbances. Since we are not told what is normal, it's difficult to know what is regarded as abnormal.

Among the possible explanations which the author puts forth and examines are: the increase in the size of government grants; military expenditures, and private long-term investment; the growth of foreign capacity to produce substitutes for our exports; reduced U. S. tariffs; increased technological advances abroad; changing relative prices

of exports (a very good discussion); and increased European protection as a result of the common market. In this section of the book, entitled "Elements of Strength and Weakness," new data tabulations on U. S. and foreign prices and costs are presented. This information will be quite useful to others. The policies examined are: deflation; changes in exchange rates; moral suasion, i.e., encouraging the Europeans to inflate; increases in international liquidity; and changes in U. S. monetary policy.

One is left with the feeling that the policy solution to the deficit will be found in two areas: Federal Reserve actions to reverse the flow of short-term private capital; and a long-run improvement in the balance on current account due to restraint on domestic inflation. In this regard the author appears somewhat optimistic about the future of the basic balance even in the absence of any government policy. Continued growth of our overseas customers and our growing exports of technologically advanced goods suggest such a conclusion. In addition, he cites continued growth of income from foreign investments as an element of strength.

The most serious omission from the study is in the area of long-term capital movements. There is little examination of policies specifically designed to influence long-run movements of capital, and little analysis of the responsiveness of such transactions to differentials and variations in borrowing costs and rates of return. It is hoped that some light will be shed on this area in later National Bureau studies. The absence of such discussion in Lary's work leaves one with the feeling that public policy may operate on short-term capital or on the current account, but has no role to play in the movements of long-term capital.

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Commercial Bank Loan and Investment Policy. By DONALD R. HODGMAN. Urbana, Illinois: Bureau of Economic and Business Research, University of Illinois, 1963. Pp. 181. $4.50.

Hodgman breaks new ground in viewing the bank as concerned with the acquisition of deposits, as well as with the purchase of assets. Hodgman argues convincingly that banks have a strong preference for industrial and commercial loans—a preference which is explained not by a higher net yield on such loans, but by the fact that they bring deposits and other business (stock transfer agencies, for example) to the bank. The key to an understanding of the bank is the customer relationship – loans bring customers, and customers bring deposits. According to Hodgman, services such as the safekeeping and transfer of money are not trivial appendages to credit creating institutions, but the "basic product" of commercial banks.

Since the capture of deposits is so important, Hodgman considers the limits of competition for deposits. First, there is the prohibition of interest on demand deposits. This would tend to make competition act through lowering interest rates on loans to large depositors. But, says Hodgman, the prime rate convention protects banks. Competition could also take the form of allowing a higher volume of loans per dollar of deposits—but here the compensatory balance requirement sets a limit (and *this* is the reason for the existence of a compensatory balance requirement). Finally, there could be competition in service charges, but these charges tend to be standardized.

There are many other noteworthy facets to this book. To cite a few examples, the customer relationship provides an interesting rationale of credit rationing, as well as an insight into the branch bank issue. In addition, there is a worthwhile discussion of the locking-in effect and the investment portfolio in general.

At several points the book is subject to criticism. It is based on interviews with eighteen large banks—and there is some question as to whether these are typical for the whole industry. Moreover, Hodgman's treatment of compensatory balances seems to ignore the fact that the percentage of the loan required (and hence the maximum loan volume corresponding to the deposit) varies among banks.

Nevertheless, this is an important book.

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